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MONTANA ECONOMIC INDICATORS

First Quarter 1981

RESEARCH AND ANALYSIS SECTION
EMPLOYMENT SECURITY DIVISION
DEPARTMENT OF LABOR AND INDUSTRY
P.O. BOX 1728
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MONTANA
ECONOMIC INDICATORS

AN ANALYSIS OF PAST AND PRESENT ECONOMIC TRENDS

STATE OF MONTANA

TED SCHWINDEN, GOVERNOR

DEPARTMENT OF LABOR AND INDUSTRY
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Montana Dakota Utilities

Montana Power Company

Pacific Power and Light

Mountain Bell Telephone Company

Business Week

Employment, Hours and Earnings, and Labor Turnover data produced in cooperation with U. S. Department of Labor, Bureau of Labor Statistics, and the Employment and Training Administration.

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DEFINITIONS

Seasonal Adjustment- A mathematical procedure in which average seasonal fluctuations are removed from the origional data leaving a time series that may be analyzed for underlying trends. Seasonal adjustment will be designated by the terms seasonally adjusted, adjusted, or adj.. All indicators are seasonally adjusted unless noted, in which case the origional data is presented and designated by the terms not seasonally adjusted, raw data, unadjusted, or unadj.

Economic Indicators- Statistical time series whose cyclical characteristics are known and fairly stable, particularly in the timing of their cyclical peaks and troughs relative to business cycles turns. Economic Indicators are used for the interpretation of past, current, and anticipation of prospective business conditions.

Business Cycles--Sequences of expansions and contractions of aggregate economic activity such as production, employment, income, and trade are defined as business cycles.

Leading Indicator- An economic time series that tends to reverse direction sufficiently in advance of changes in the business cycle.

Coinciding Indicator- An economic time series that parallels changes in the business cycle.

Lagging Indicator- An economic time series that reverses direction after that of the business cycle.

Selected Indicator- An economic time series whose timing to business cycles is unknown, but is of interest to Montana's economy.

Index- Any economic time series which indicates change in a factor from a reference year. The reference year is designated as 100 in this publication and may be selected arbitrarily. All indexes in this publication will designate the year selected, such as 1967 = 100; 1972 = 100, etc.

Montana Composite Index- A composite of six indicators of employment and economic activity: Building Permits, Manufacturing Employment: Average Weekly Hours in Manufacturing, Average Weekly Initial Claims, Accession Rate in Manufacturing, and Layoff rate in Manufacturing. A reverse trend has been used for the Layoff Rate and Average Weekly Initial Claims. The components are converted to a series of standardized changes and weights according to their significance and reliability as economic indicators in making the composite, indexed to 1972 = 100.

Real Spendable Earnings- Real spendable average weekly earnings of private nonagricultural production workers represents the earnings of a hypothetical worker after deductions for State Income, Federal Income, and Social Security taxes, and adjustment for change in purchasing power since 1967. This individual is assumed to be the sole support for a family of four, earn the average weekly gross earnings of production workers in Montana's private non-agricultural industries, and take standard tax tables. Purchasing power was adjusted by deflating Spendable Earnings based on the national ALL Items Consumer Price Index.

A NOTE ABOUT BENCHMARKING AND SEASONAL ADJUSTMENT CHANGES

Because of new benchmarks and new seasonal adjustment factors, some of the series in this publication have been changed to take into account the latest information available. 1980 benchmarks, which reflect the most recent and complete estimates of employment, account for revisions to indicators dealing with total and industry detailed employment. These benchmark levels are revised annually to adjust for sampling errors and any changes to industrial classifications. In addition, all of those series requiring seasonal adjustment have also been revised to reflect the most recent seasonal adjustment factors. Changes in these seasonal series can be attributed to the inclusion of 1980 data in the BLS seasonal adjustment method.

All numbers used in this publication are seasonally adjusted.

FIRST QUARTER ANALYSIS: 1981

The first quarter of 1981 displayed mixed movement in Montana's economic indicators. The leading, coinciding and selected indicators include a total of 28 components. Half of these components registered positive movement, while the other half registered either little change or negative movement. Overall, the indicators appear to show little change since the fourth quarter, 1980. During the fourth quarter, nearly two thirds of the components recorded good signs. Generally speaking, this shows the economy is moving in a positive direction.

Of the leading indicators, improvement was noted in four of the components. They were; total number of building permits, new corporations, the manufacturing quit rate and average weekly initial claims. Total non-agricultural placements dropped by an average of 580 per month during the 1st quarter. Manufacturing layoffs, accessions, new hires and weekly hours all registered negative movement from January through March.

Montana's coinciding indicators, which parallel changes in the business cycle, are moving in a positive direction. Average weekly insured unemployed dropped by over 2000 per month during the first quarter. The manufacturing electric power sales index, along with the commercial-industrial electric power sales index, displayed significant improvement from January through March. New car registrations jumped from a monthly average of 1736 during the fourth quarter, 1980 to an average of 2375 during the first quarter of 1981.

Very little change was noted in the unemployment total and the unemployment rate. The fourth quarter unemployment total averaged 22,300 and the first quarter, 1981 averaged 22,500. The unemployment rate dropped from a fourth quarter figure of 6.0% to 5.9% from January through March.

The selected indicators posted slight negative movements in some of the oil and gas related components. Taxable gallons of gasoline slipped from 41,560 per month in the fourth quarter to 40,341 per month during the first quarter, 1981. Natural gas withdrawals totaled 5140 million cubic feet during the fourth quarter, 1980, and in the first three months of 1981, totaled an average of 4582 million. From January through March oil production rose while oil refined fell. Oil and gas wells completed and help wanted advertising both showed some improvement over the previous quarter.

Both Montana's nonagricultural employment index and the U.S. non-agricultural employment index continued to grow. The Montana index increased from 127.0 to 129.3 during the first quarter. The U.S. non-agricultural employment index rose from an average of 120.1 per month from October through December, 1980 to 121.0 per month from January through March, 1981.

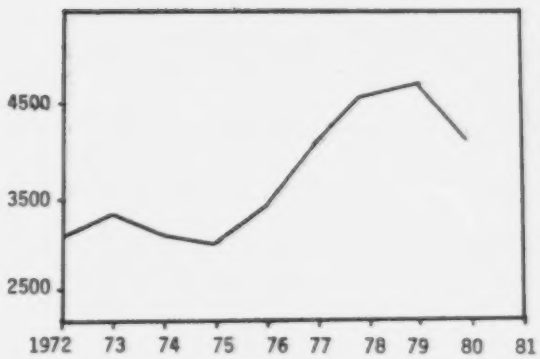
The composite index and the marginal employment adjustment index both registered slight decreases during the first quarter. The Montana Composite Index dropped from 96.0 to 95.5, while the marginal employment adjustment index went from 95.1 to 94.5.

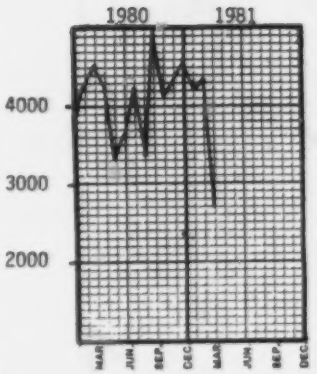
The first quarter of 1981 posted declines in Montana's real weekly spendable earnings, as gross weekly earnings continued to climb. The biggest reason for the continuous decrease in real weekly spendable earnings is due to the rate of inflation.

LEADING INDICATORS

TOTAL NON-AGRICULTURAL PLACEMENTS

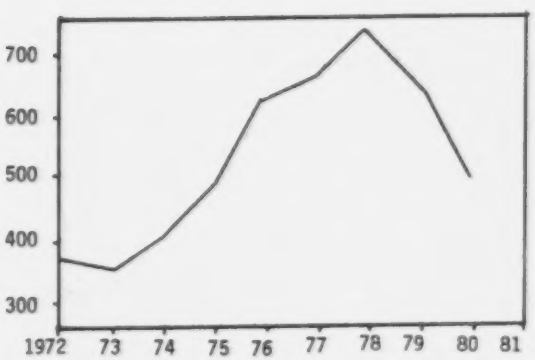
	1980	1981
January	3983	4224
February	4270	4352
March	4525	2704
April	4259	
May	3337	
June	3649	
July	4243	
August	3394	
September	4999	
October	4146	
November	4335	
December	4538	

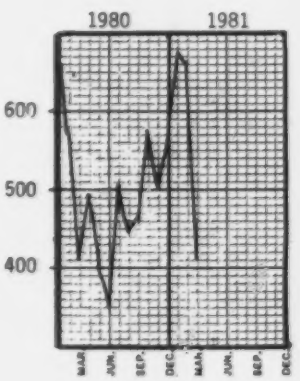




TOTAL NUMBER OF BUILDING PERMITS

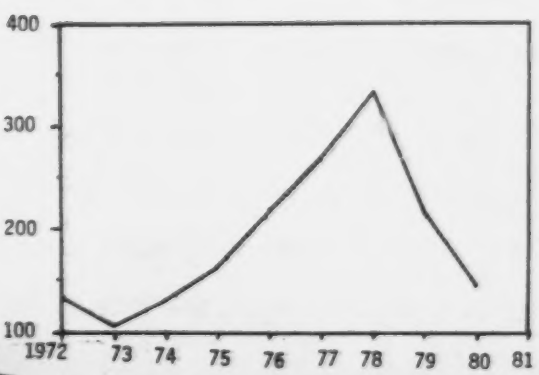
	1980	1981
January	657	676
February	571	661
March	411	414
April	494	
May	403	
June	351	
July	507	
August	447	
September	465	
October	575	
November	506	
December	557	

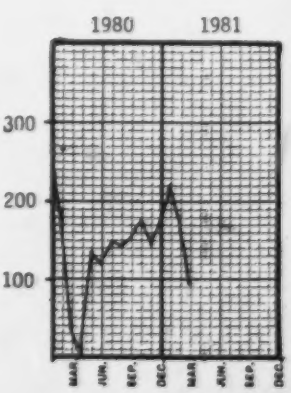




NUMBER OF RESIDENTIAL BUILDING PERMITS

	1980	1981
January	234	221
February	184	163
March	39	95
April	4	
May	135	
June	121	
July	148	
August	143	
September	153	
October	177	
November	145	
December	174	





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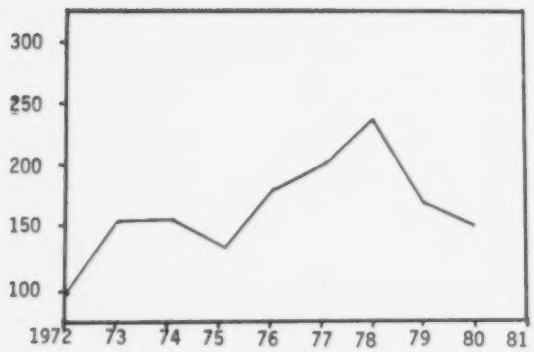
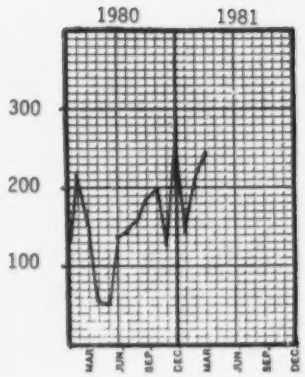
LEADING INDICATORS

NEW BUSINESS TELEPHONES

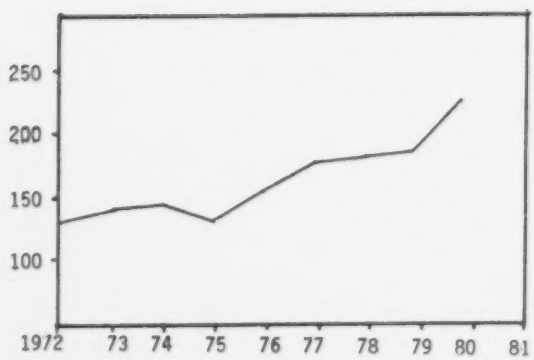
	1980	1981
January	135	141
February	218	213
March	154	245
April	58	
May	53	
June	138	
July	145	
August	159	
September	185	
October	197	
November	124	
December	267	

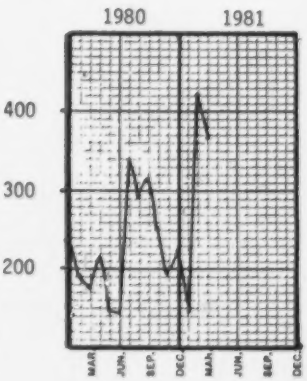




NEW CORPORATIONS

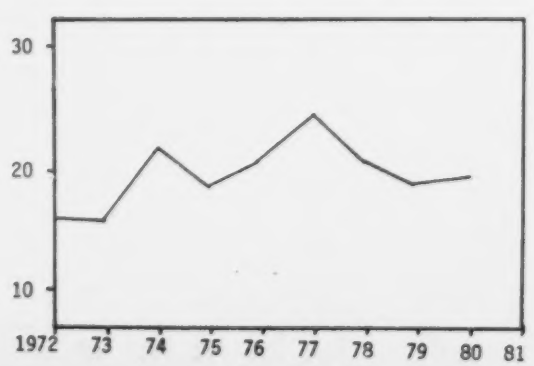
	1980	1981
January	227	145
February	190	422
March	176	366
April	216	
May	146	
June	145	
July	339	
August	294	
September	316	
October	251	
November	194	
December	225	

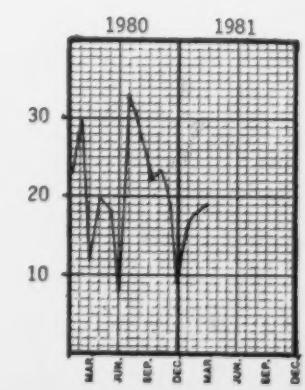




WITHDRAWALS AND DISSOLUTIONS OF CORPORATIONS

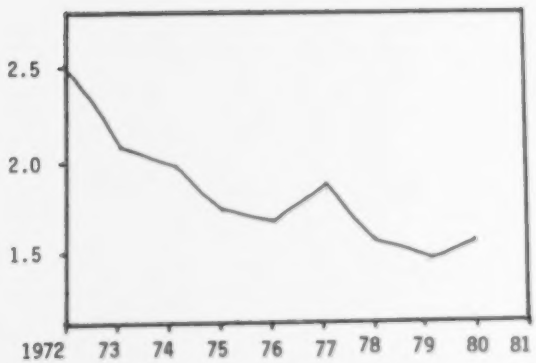
	1980	1981
January	21	16
February	30	18
March	12	19
April	20	
May	18	
June	8	
July	33	
August	28	
September	22	
October	23	
November	19	
December	9	

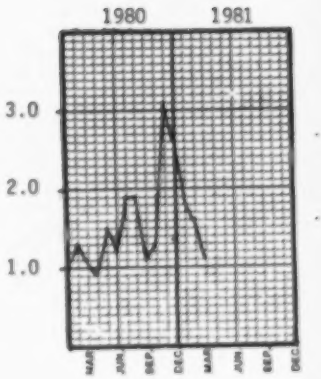




MANUFACTURING QUIT RATE (PER 100 EMPLOYEES)

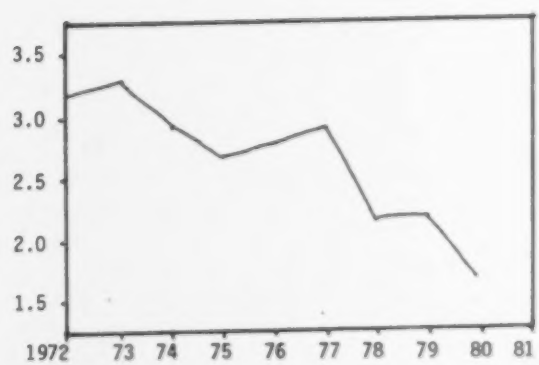
	1980	1981
January	1.0	1.8
February	1.3	1.6
March	1.1	1.1
April	.9	
May	1.5	
June	1.2	
July	1.9	
August	1.9	
September	1.1	
October	1.3	
November	3.1	
December	2.6	

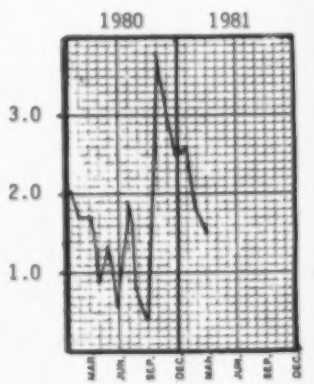




NEW HIRES IN MANUFACTURING (PER 100 EMPLOYEES)

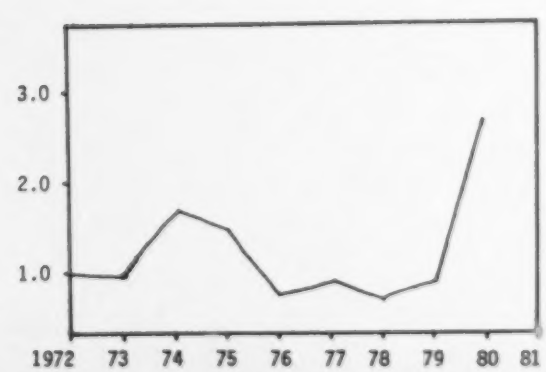
	1980	1981
January	2.0	2.6
February	1.7	1.8
March	1.7	1.5
April	1.0	
May	1.4	
June	.6	
July	1.9	
August	.8	
September	.4	
October	3.8	
November	3.1	
December	2.6	

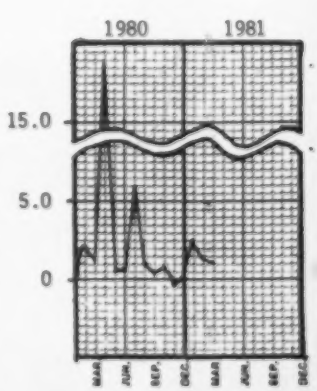




MANUFACTURING LAYOFF RATE (PER 100 EMPLOYEES)

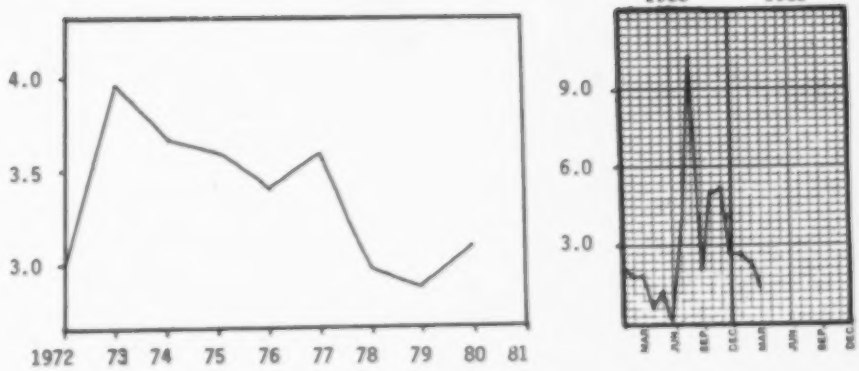
	1980	1980
January	.3	2.5
February	2.2	1.4
March	1.3	1.2
April	18.8	
May	.5	
June	.7	
July	5.9	
August	1.0	
September	.4	
October	.8	
November	-.3	
December	.1	





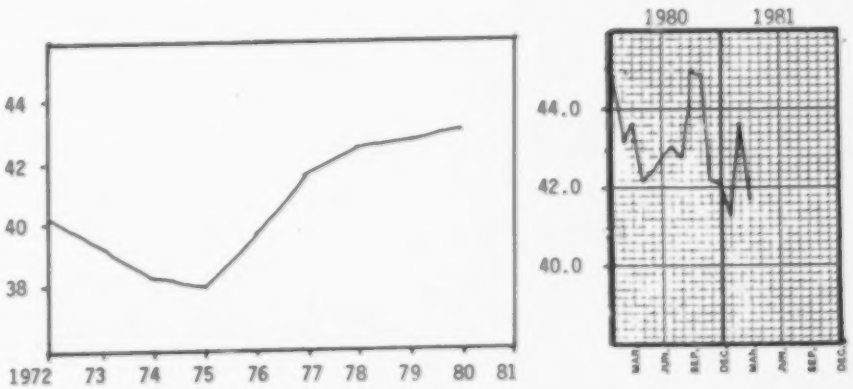
MANUFACTURING ACCESSION RATE (PER 100 EMPLOYEES)

	1980	1981
January	2.0	2.6
February	1.9	2.4
March	1.9	1.6
April	.7	
May	1.3	
June	0.0	
July	3.8	
August	10.8	
September	2.2	
October	5.0	
November	5.2	
December	2.7	



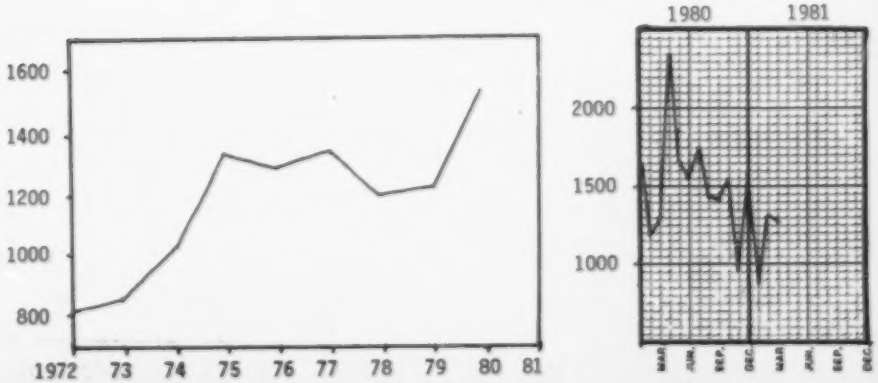
MANUFACTURING AVERAGE WEEKLY HOURS

	1980	1981
January	44.8	41.3
February	43.2	43.6
March	43.6	41.7
April	42.2	
May	42.5	
June	42.8	
July	43.0	
August	42.8	
September	45.0	
October	44.9	
November	42.2	
December	42.1	



AVERAGE WEEKLY INITIAL CLAIMS

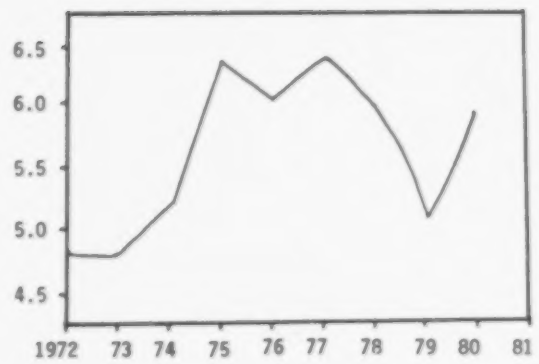
	1980	1981
January	1640	883
February	1197	1314
March	1299	1276
April	2346	
May	1659	
June	1551	
July	1749	
August	1443	
September	1435	
October	1540	
November	975	
December	1588	

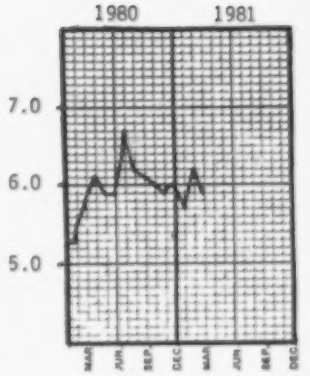


COINCIDING INDICATORS

UNEMPLOYMENT RATE (PERCENT)

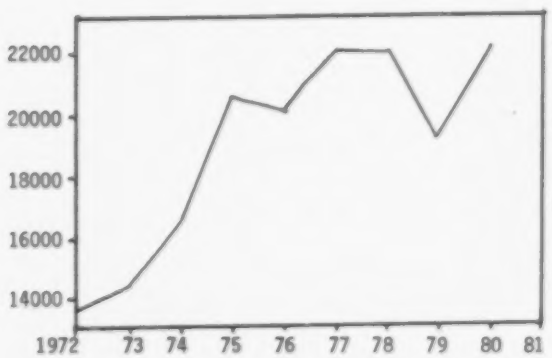
	1980	1981
January	5.3	5.7
February	5.3	6.2
March	5.8	5.9
April	6.1	
May	5.9	
June	5.9	
July	6.7	
August	6.2	
September	6.1	
October	6.0	
November	5.9	
December	6.0	

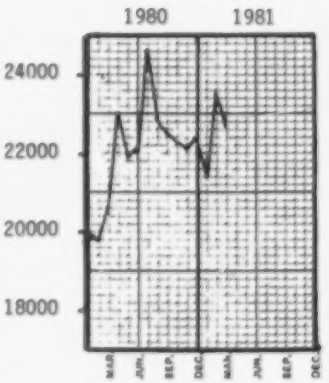




UNEMPLOYMENT TOTAL

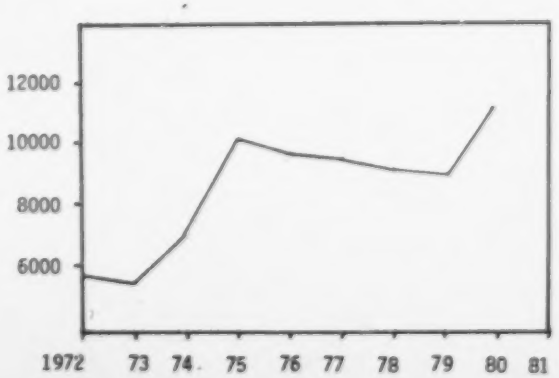
	1980	1981
January	19.9	21.4
February	19.8	23.5
March	20.6	22.7
April	23.0	
May	21.9	
June	22.1	
July	24.6	
August	22.9	
September	22.5	
October	22.3	
November	22.1	
December	22.4	

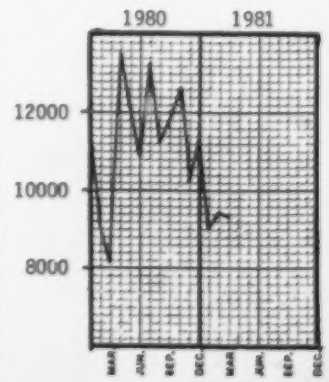




AVERAGE WEEKLY INSURED UNEMPLOYED

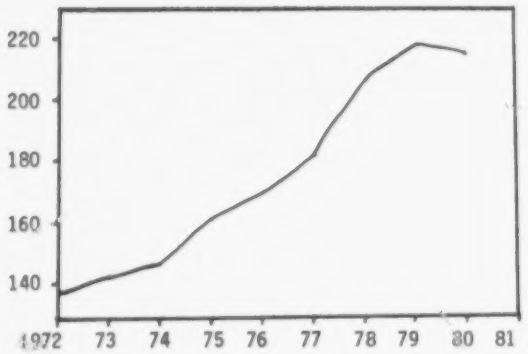
	1980	1981
January	11063	9040
February	9304	9423
March	8182	9391
April	13547	
May	12164	
June	10865	
July	13275	
August	11241	
September	11816	
October	12632	
November	10217	
December	11275	

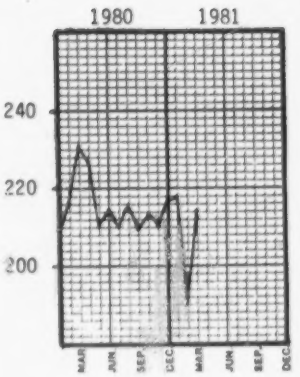




RESIDENTIAL ELECTRICAL POWER SALES INDEX (1967=100

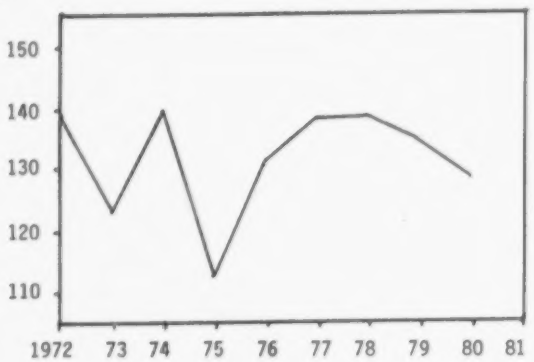
	1980	1981
January	211.3	217.8
February	219.2	190.8
March	231.0	214.4
April	227.3	
May	210.7	
June	214.8	
July	210.1	
August	215.5	
September	209.8	
October	213.6	
November	213.1	
December	217.3	

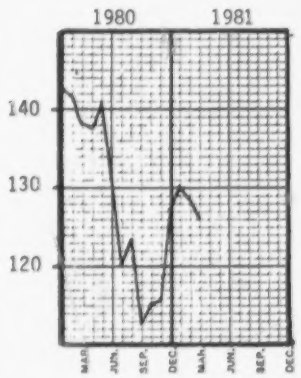




MANUFACTURING ELECTRICAL POWER SALES INDEX (1967=100)

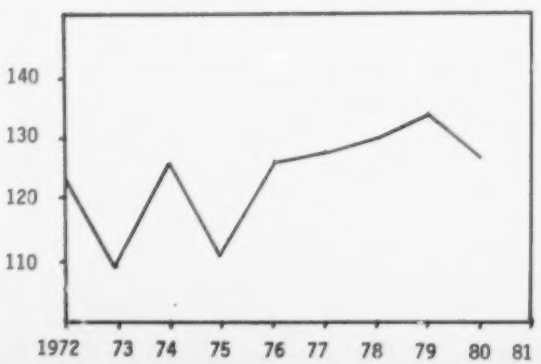
	1980	1981
January	142.8	130.1
February	141.8	128.8
March	138.3	126.1
April	137.9	
May	140.9	
June	131.1	
July	120.1	
August	123.5	
September	112.9	
October	115.2	
November	115.9	
December	127.2	

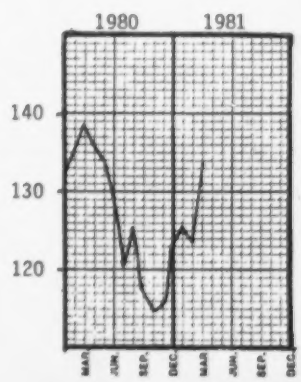




COMMERCIAL-INDUSTRIAL ELECTRICAL POWER SALES INDEX (1967=100)

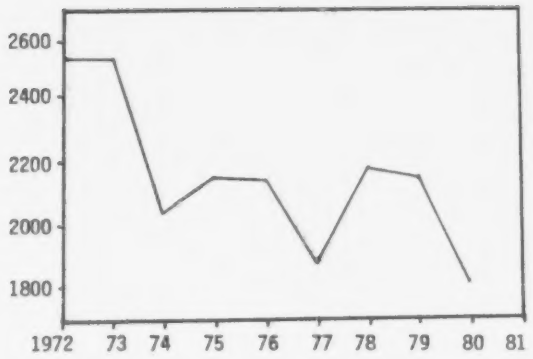
	1980	1981
January	132.9	125.5
February	135.5	123.5
March	138.7	133.5
April	135.9	
May	134.0	
June	129.1	
July	120.5	
August	125.3	
September	117.4	
October	114.9	
November	115.8	
December	123.0	

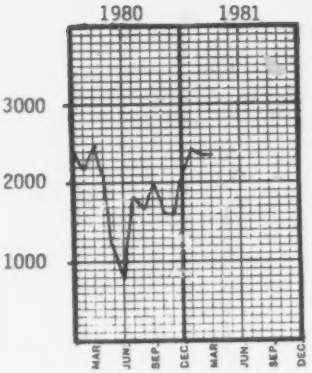




NEW CAR REGISTRATIONS

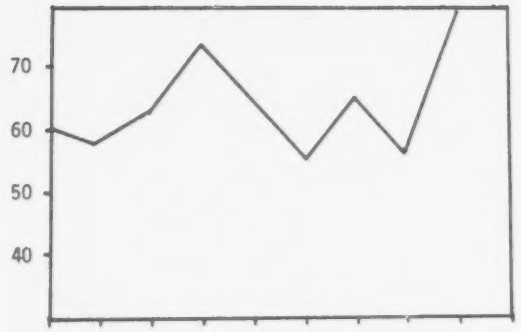
	1980	1981
January	2335	2416
February	2207	2351
March	2427	2355
April	2109	
May	1224	
June	791	
July	1801	
August	1682	
September	1962	
October	1600	
November	1591	
December	2018	

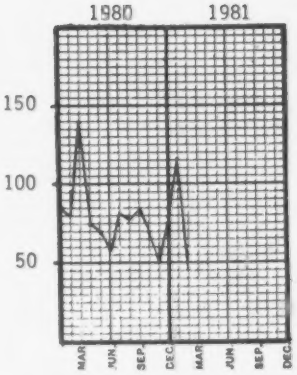




OIL AND GAS WELLS COMPLETED

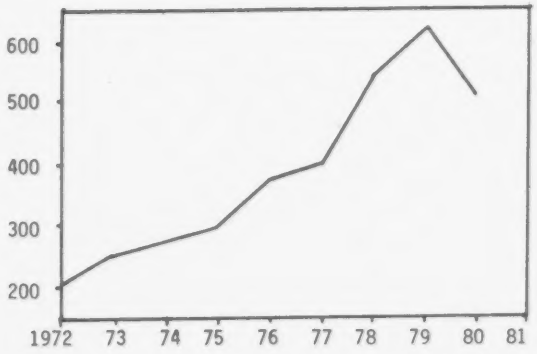
	1980	1981
January	86	116
February	80	46
March	140	
April	74	
May	70	
June	58	
July	82	
August	77	
September	84	
October	69	
November	51	
December	79	

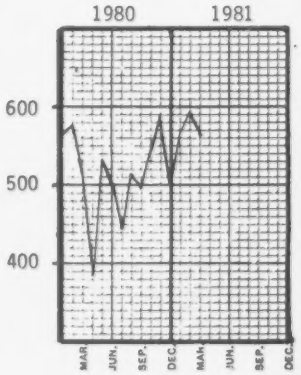




HELP WANTED ADVERTISING (FROM 5 MAJOR CITY DAILIES)

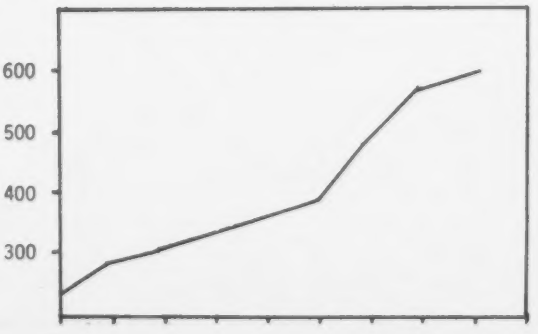
	1980	1981
January	567	564
February	577	592
March	514	563
April	384	
May	531	
June	508	
July	445	
August	512	
September	497	
October	544	
November	588	
December	505	

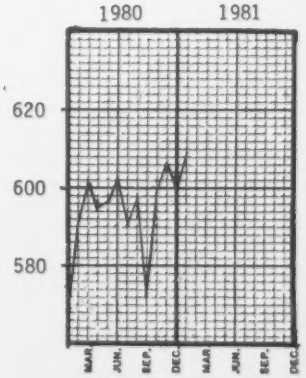




MONTANA PERSONAL INCOME (IN MILLION DOLLARS)

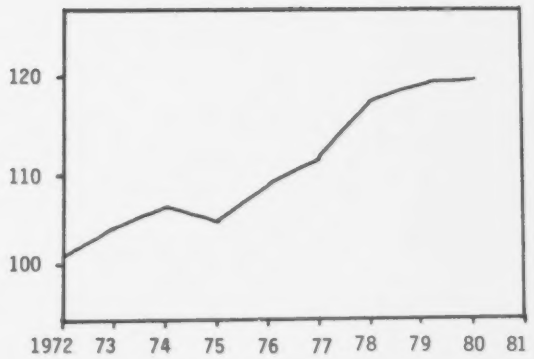
	1980	1981
January	569.3	609.3
February	591.8	
March	601.1	
April	595.3	
May	596.5	
June	602.3	
July	590.2	
August	597.5	
September	572.0	
October	599.0	
November	606.2	
December	600.1	

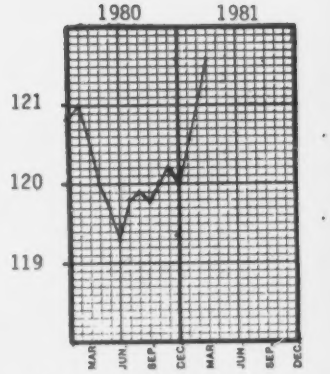




NONAGRICULTURAL EMPLOYMENT INDEX
U.S.: 1972=100

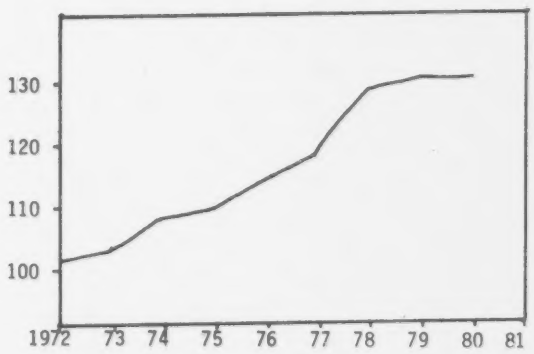
	1980	1981
January	120.8	120.5
February	121.0	121.0
March	120.5	121.6
April	120.0	
May	119.7	
June	119.3	
July	119.8	
August	119.9	
September	119.8	
October	120.0	
November	120.2	
December	120.0	

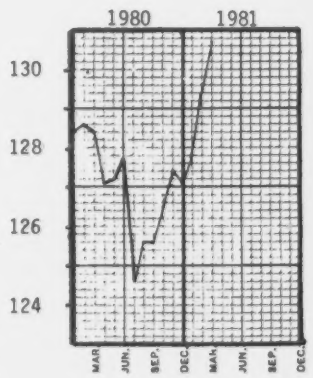




NONAGRICULTURAL EMPLOYMENT INDEX
MONTANA: 1972=100

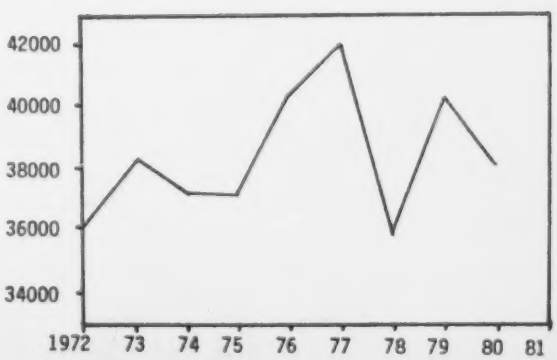
	1980	1981
January	128.4	127.8
February	128.6	129.4
March	128.4	130.7
April	127.1	
May	127.2	
June	127.7	
July	124.6	
August	125.6	
September	125.6	
October	126.5	
November	127.4	
December	127.1	

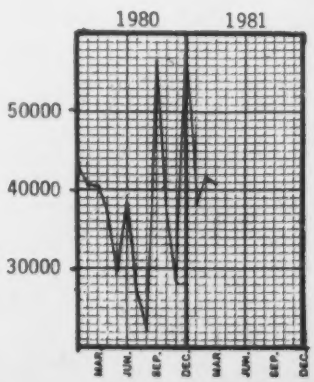




TAXABLE GALLONS
GASOLINE
(THOUSAND GALLONS)

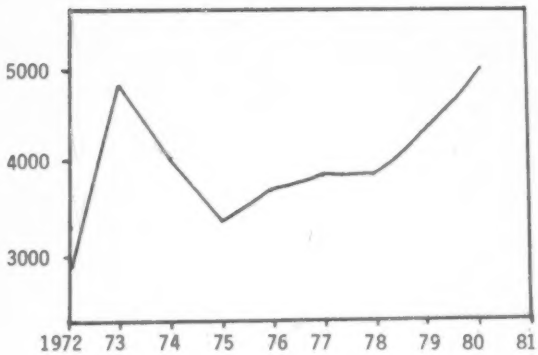
	1980	1981
January	43351	38162
February	40752	41891
March	40230	40972
April	37129	
May	29968	
June	38446	
July	26764	
August	22306	
September	56853	
October	38669	
November	28400	
December	57612	

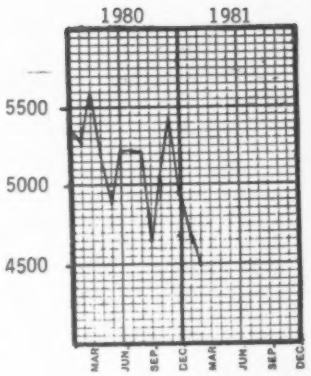




NATURAL GAS WITHDRAWLS (MILLION CU.FT.)

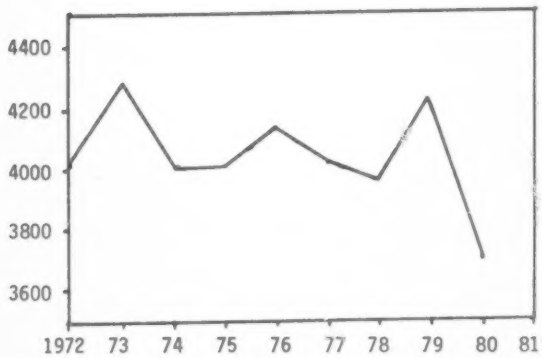
	1980	1981
January	5350	4665
February	5280	4499
March	5603	
April	5176	
May	4878	
June	5214	
July	5222	
August	5212	
September	4647	
October	5050	
November	5442	
December	4930	

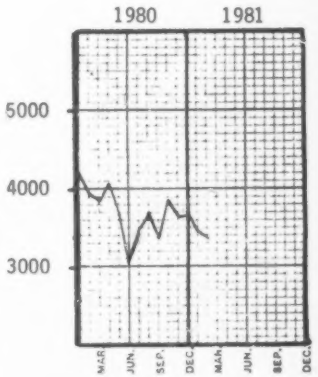




OIL REFINED (THOUSAND BARRELS)

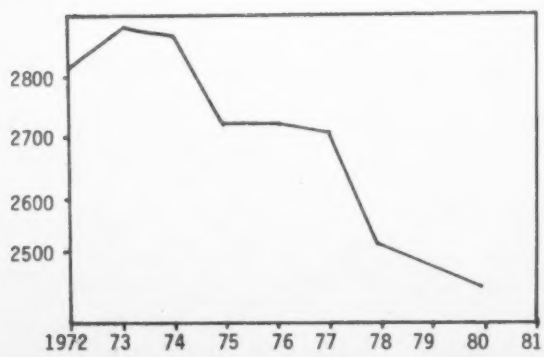
	1980	1981
January	4249	3468
February	3932	3380
March	3865	
April	4053	
May	3677	
June	3071	
July	3466	
August	3694	
September	3384	
October	3822	
November	3660	
December	3652	

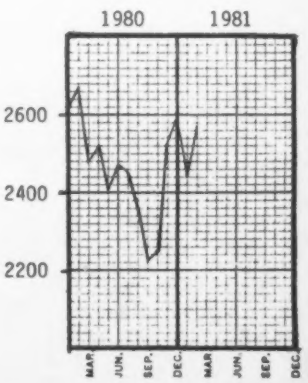




OIL PRODUCTION (THOUSAND BARRELS)

	1980	1981
January	2620	2445
February	2668	2576
March	2479	
April	2520	
May	2411	
June	2466	
July	2448	
August	2362	
September	2232	
October	2253	
November	2525	
December	2583	





EMPLOYMENT IN MONTANA'S INDUSTRIAL SECTORS: 1st Quarter 1981

Industrial employment in 1980 dropped below the 1979 averages in nearly all sectors, but during the first three months of 1981 the averages have increased in every industry except one, which remained the same.

Manufacturing employment was the only industry during the first quarter which did not post an increase. Employment stayed the same at 23,300.

Non-agricultural wage and salary employment rose to an average of 279,700. The 1980 average was reported at 280,600.

Some industries reporting considerable growth include; contract construction which rose from 14,500 to 16,000, and in 1980 averaged 14,700. Retail trade jumped from 54,000 to 55,400 which compares to 55,700 during the first quarter of 1980. Services also showed a substantial increase as it rose from 56,600 during the fourth quarter, 1980 to 58,200 in the first quarter of 1981. During 1980, the average monthly employment in services totaled 56,600.

The mining industry and transportation and public utilities rose by 1100 and 1000 respectively, while the lumber and wood products industry increased by only 500 over the last quarter of 1980.

Wholesale trade and Government each rose by 800 employees during the first quarter, 1981. Both these industries recorded employment growth of nearly 1000 over their 1980 averages.

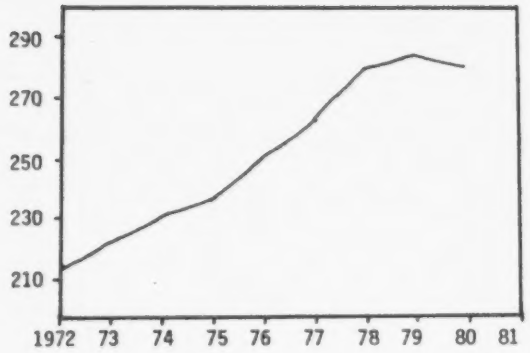
Finance, Insurance, and Real Estate registered much the same employment as it did during all of 1980 with employment of 12,900, only 100 more than the 1980 average.

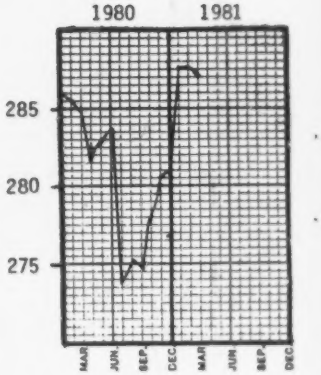
Little change is expected during the second quarter. There will be a lot of seasonal employment, but is should not reflect a big change in employment after seasonal adjustments are taken into account.

INDUSTRIAL EMPLOYMENT

NONAGRICULTURAL WAGE AND SALARY (IN THOUSANDS)

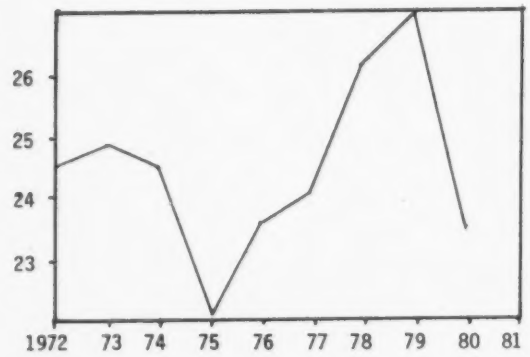
	1980	1981
January	285.9	287.6
February	285.4	287.7
March	284.8	287.1
April	281.6	
May	282.9	
June	283.6	
July	273.8	
August	275.2	
September	274.7	
October	277.8	
November	280.5	
December	280.8	

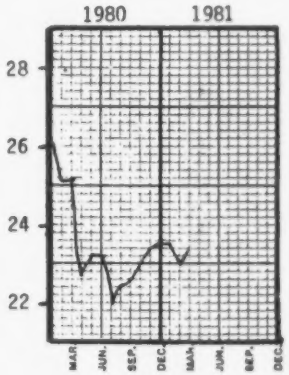




MANUFACTURING EMPLOYMENT (IN THOUSANDS)

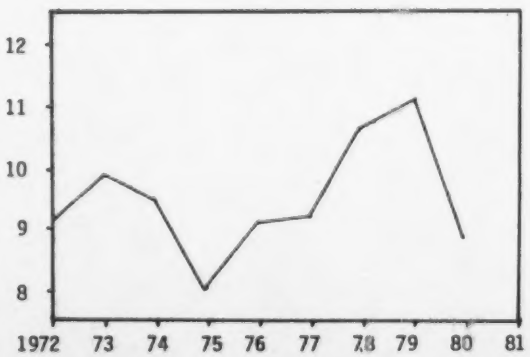
	1980	1981
January	26.1	23.5
February	25.1	23.0
March	25.1	23.4
April	22.7	
May	23.2	
June	23.2	
July	22.0	
August	22.5	
September	22.6	
October	23.1	
November	23.4	
December	23.5	

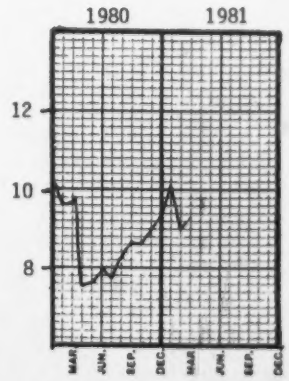




LUMBER AND WOOD PRODUCTS (IN THOUSANDS)

	1980	1981
January	10.2	10.1
February	9.7	9.0
March	9.8	9.3
April	7.6	
May	7.7	
June	8.0	
July	7.8	
August	8.4	
September	8.7	
October	8.7	
November	9.1	
December	9.3	

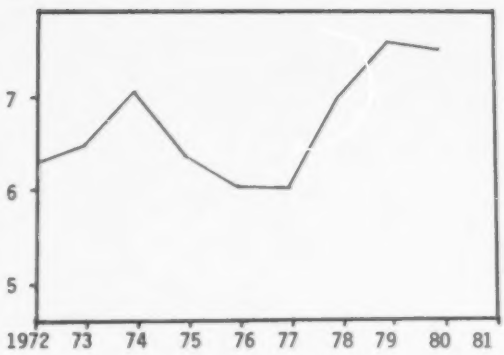


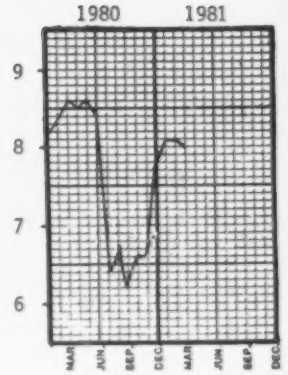


INDUSTRIAL EMPLOYMENT

MINING
(IN THOUSANDS)

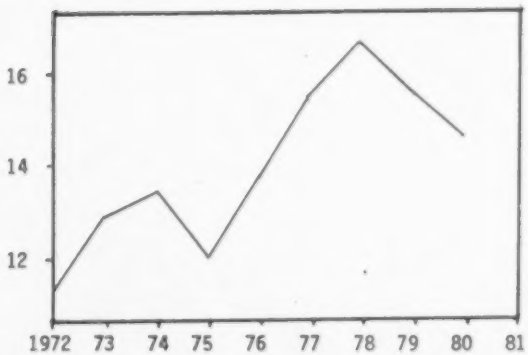
	1980	1981
January	8.4	8.1
February	8.4	8.1
March	8.6	8.0
April	8.5	
May	8.6	
June	8.4	
July	6.4	
August	6.7	
September	6.2	
October	6.6	
November	6.6	
December	7.7	

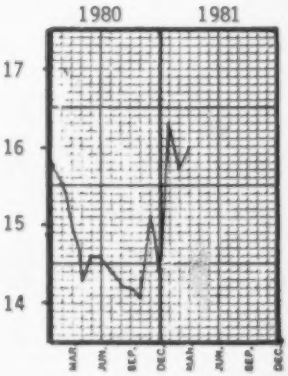




CONTRACT CONSTRUCTION
(IN THOUSANDS)

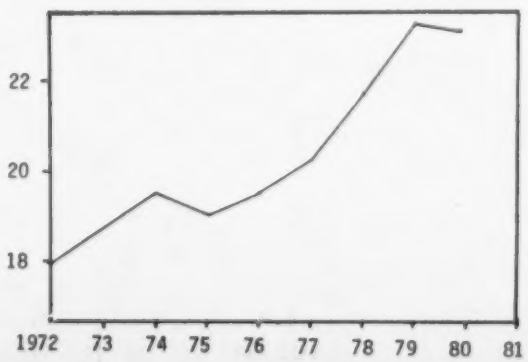
	1980	1981
January	15.8	16.3
February	15.5	15.7
March	15.0	16.0
April	14.3	
May	14.6	
June	14.6	
July	14.4	
August	14.3	
September	14.2	
October	14.1	
November	15.1	
December	14.4	

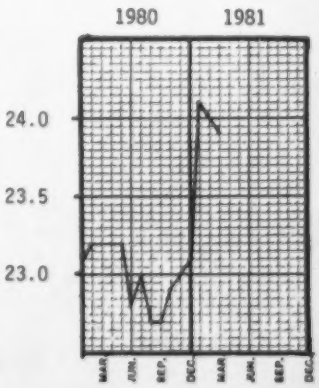




TRANSPORTATION AND PUBLIC UTILITIES
(IN THOUSANDS)

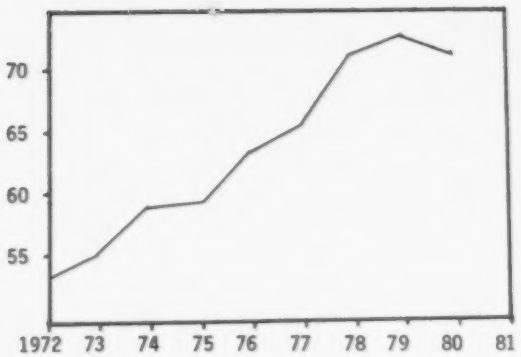
	1980	1981
January	23.1	24.1
February	23.2	24.0
March	23.2	23.9
April	23.2	
May	23.2	
June	22.8	
July	23.0	
August	22.7	
September	22.7	
October	22.9	
November	23.0	
December	23.1	

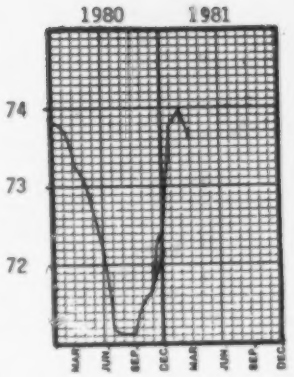




WHOLESALE AND RETAIL TRADE (IN THOUSANDS)

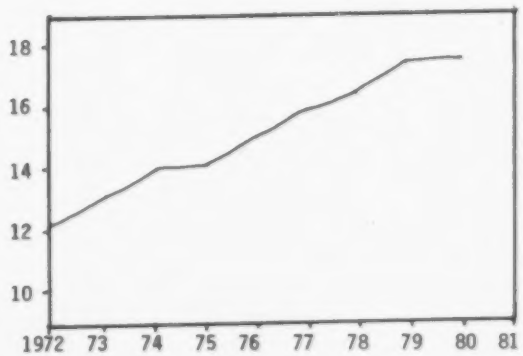
	1980	1981
January	73.8	73.8
February	73.7	74.0
March	73.3	73.6
April	73.1	
May	72.7	
June	72.1	
July	71.2	
August	71.1	
September	71.1	
October	71.5	
November	71.7	
December	72.1	

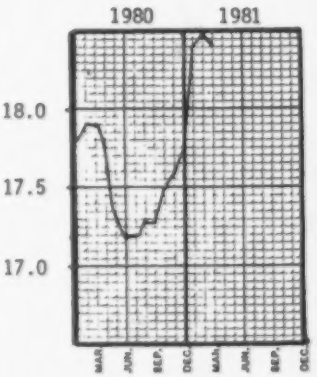




WHOLESALE TRADE (IN THOUSANDS)

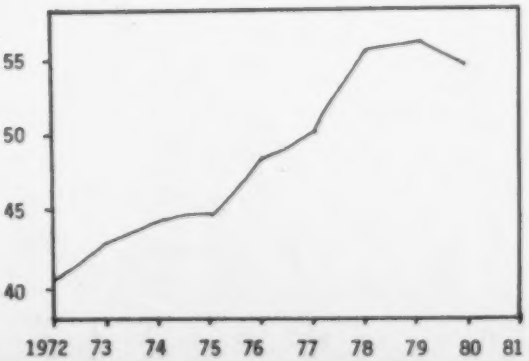
	1980	1981
January	17.8	18.4
February	17.9	18.5
March	17.9	18.4
April	17.6	
May	17.3	
June	17.2	
July	17.2	
August	17.3	
September	17.3	
October	17.5	
November	17.6	
December	17.7	

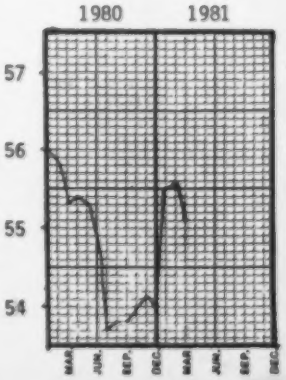




RETAIL TRADE (IN THOUSANDS)

	1980	1981
January	56.0	55.5
February	55.8	55.6
March	55.3	55.1
April	55.4	
May	55.3	
June	54.9	
July	53.7	
August	53.8	
September	53.8	
October	54.0	
November	54.1	
December	54.0	

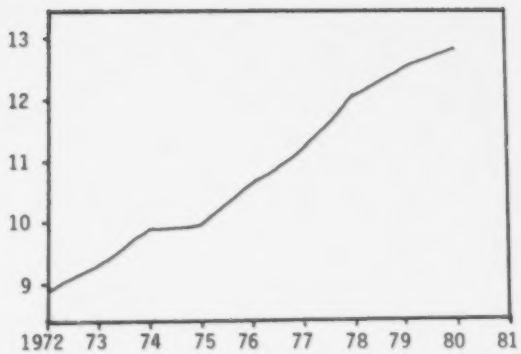


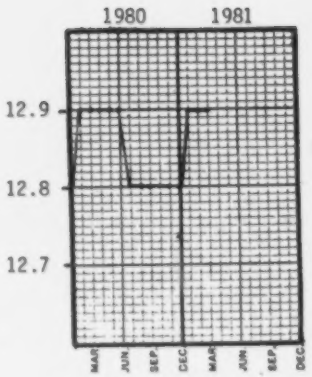


INDUSTRIAL EMPLOYMENT

FINANCE, INSURANCE & REAL ESTATE (IN THOUSANDS)

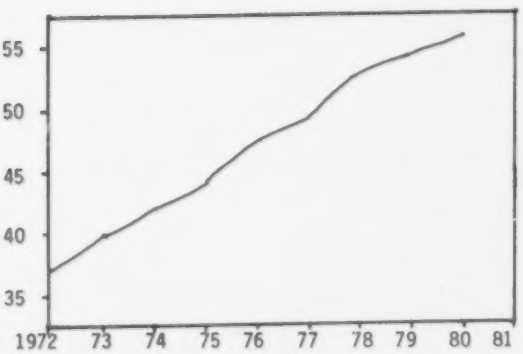
	1980	1981
January	12.8	12.9
February	12.9	12.9
March	12.9	12.9
April	12.9	
May	12.9	
June	12.9	
July	12.8	
August	12.8	
September	12.8	
October	12.8	
November	12.8	
December	12.8	

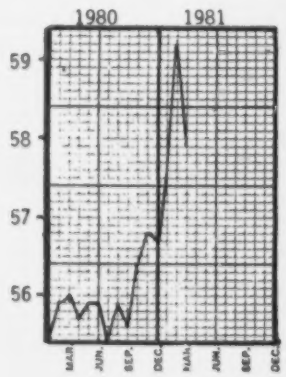




SERVICES (IN THOUSANDS)

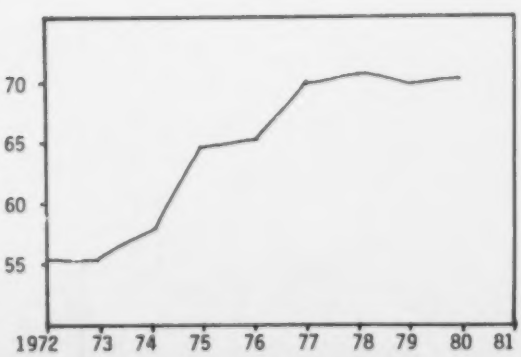
	1980	1981
January	55.4	57.5
February	55.9	59.2
March	56.0	57.9
April	55.7	
May	55.9	
June	55.9	
July	55.4	
August	55.9	
September	55.6	
October	56.4	
November	56.8	
December	56.7	

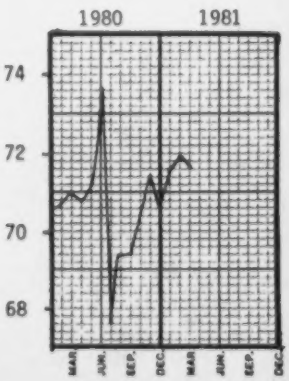




GOVERNMENT (IN THOUSANDS)

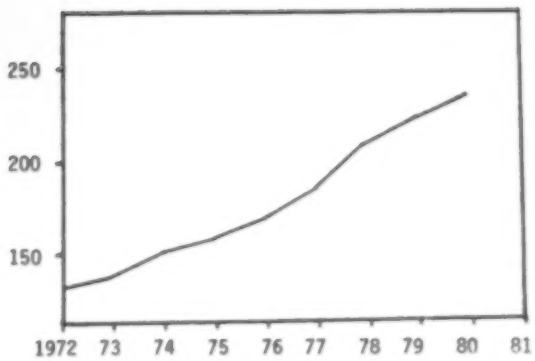
	1980	1981
January	70.6	71.6
February	70.8	71.9
March	71.0	71.7
April	70.8	
May	71.2	
June	73.8	
July	67.6	
August	69.4	
September	69.4	
October	70.6	
November	71.4	
December	70.7	

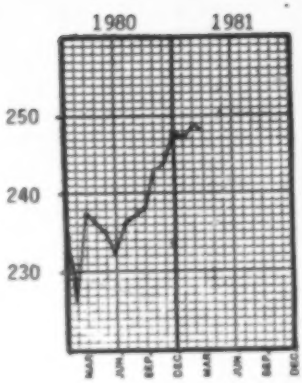




GROSS WEEKLY EARNINGS (IN DOLLARS)

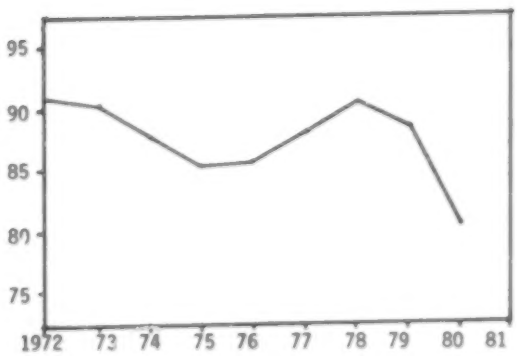
	1980	1981
January	234.61	247.32
February	226.33	248.84
March	237.50	248.00
April	236.05	
May	235.67	
June	232.36	
July	236.29	
August	237.30	
September	238.29	
October	243.05	
November	243.99	
December	247.86	

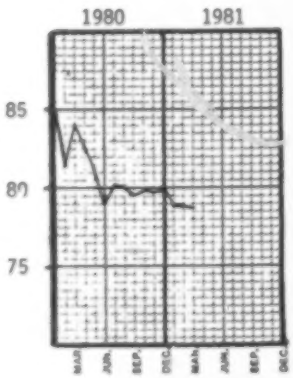




REAL WEEKLY SPENDABLE EARNINGS (IN DOLLARS)

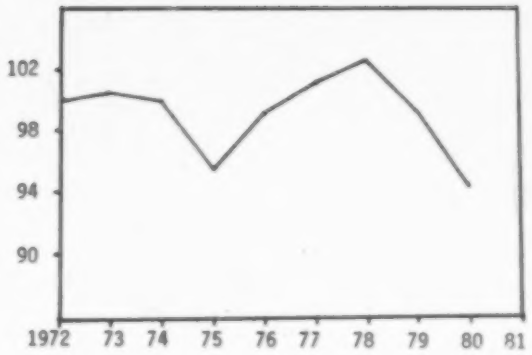
	1980	1981
January	84.82	78.89
February	81.40	78.78
March	84.12	78.64
April	82.52	
May	81.39	
June	78.93	
July	80.28	
August	80.01	
September	79.50	
October	79.85	
November	79.79	
December	79.98	

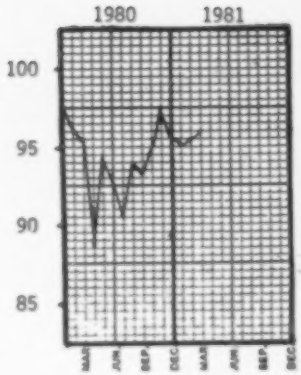




MONTANA
COMPOSITE INDEX
(1972=100)

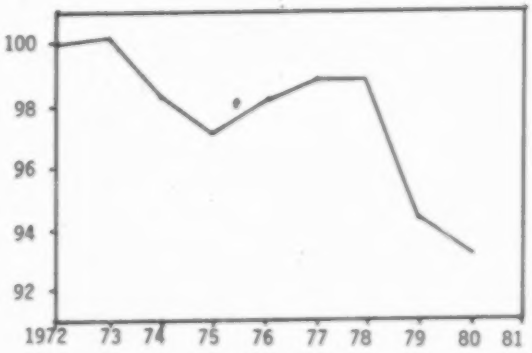
	1980	1981
January	97.2	95.1
February	96.2	95.4
March	95.4	95.9
April	88.6	
May	94.3	
June	92.6	
July	90.4	
August	93.9	
September	93.3	
October	95.0	
November	97.4	
December	95.5	

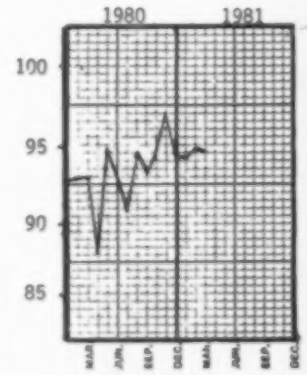




MARGINAL EMPLOYMENT
ADJUSTMENT INDEX
(1972=100)

	1980	1981
January	92.8	94.2
February	92.9	94.8
March	93.0	94.5
April	88.1	
May	94.7	
June	92.8	
July	90.8	
August	94.5	
September	93.3	
October	94.1	
November	96.9	
December	94.2	





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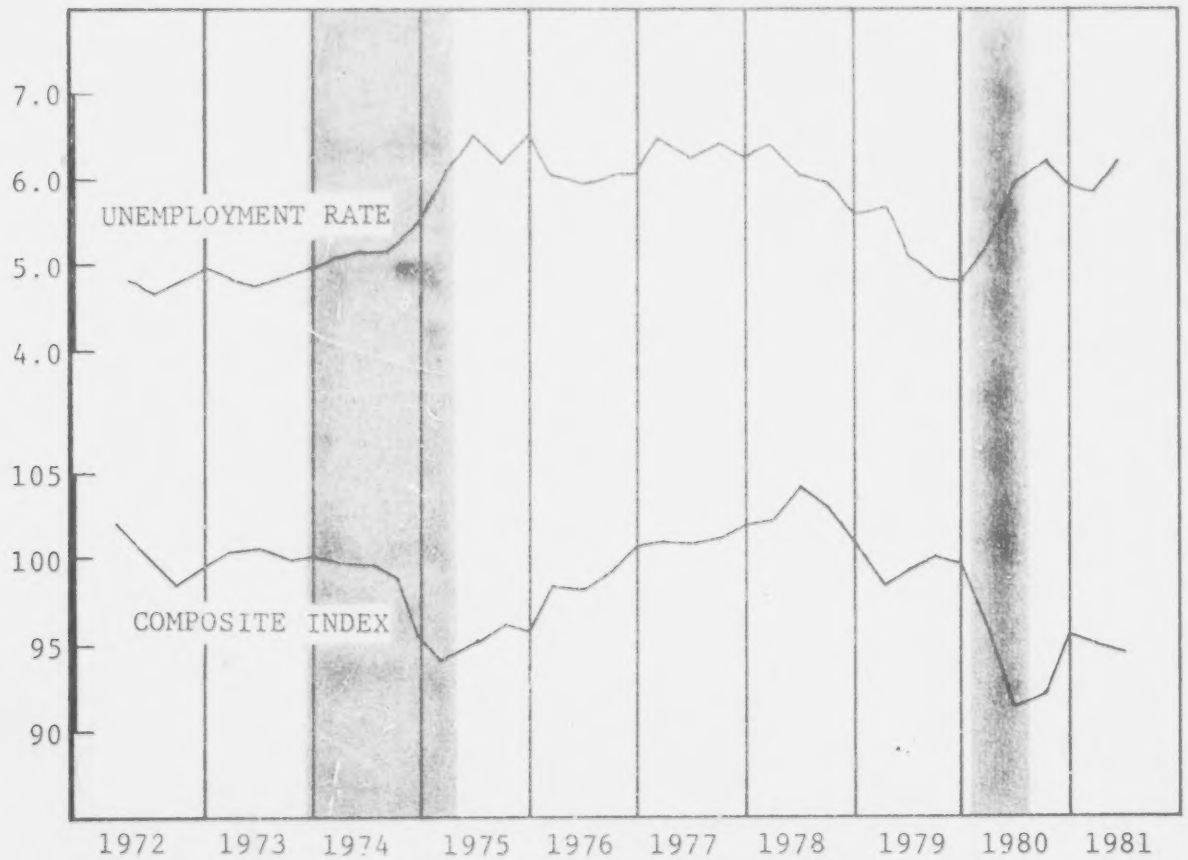
MONTANA ECONOMIC INDICATORS

Second Quarter 1981



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MONTANA
ECONOMIC INDICATORS

AN ANALYSIS OF PAST AND PRESENT ECONOMIC TRENDS

STATE OF MONTANA

TED SCHWINDEN, GOVERNOR

DEPARTMENT OF LABOR AND INDUSTRY
DAVID L. HUNTER, COMMISSIONER

EMPLOYMENT SECURITY DIVISION

RESEARCH AND ANALYSIS SECTION
EMPLOYMENT SECURITY DIVISION
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Volume VIII Number 2

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ACKNOWLEDGEMENTS

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Bureau of Business and Economic Research, University of Montana

Board of Oil and Gas Conservation

U. S. Department of Agriculture Statistical Reporting Service

Federal Reserve System - 9th Federal District

Bureau of Reclamation

Bonneville Power Administration

Montana Dakota Utilities

Montana Power Company

Pacific Power and Light

Mountain Bell Telephone Company

Business Week

Employment, Hours and Earnings, and Labor Turnover data produced in cooperation with U. S. Department of Labor, Bureau of Labor Statistics, and the Employment and Training Administration.

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DEFINITIONS

Seasonal Adjustment- A mathematical procedure in which average seasonal fluctuations are removed from the origional data leaving a time series that may be analyzed for underlying trends. Seasonal adjustment will be designated by the terms seasonally adjusted, adjusted, or adj.. All indicators are seasonally adjusted unless noted, in which case the origional data is presented and designated by the terms not seasonally adjusted, raw data, unadjusted, or unadj.

Economic Indicators- Statistical time series whose cyclical characteristics are known and fairly stable, particularly in the timing of their cyclical peaks and troughs relative to business cycles turns. Economic Indicators are used for the interpretation of past, current, and anticipation of prospective business conditions.

Business Cycles--Sequences of expansions and contractions of aggregate economic activity such as production, employment, income, and trade are defined as business cycles.

Leading Indicator- An economic time series that tends to reverse direction sufficiently in advance of changes in the business cycle.

Coinciding Indicator- An economic time series that parallels changes in the business cycle.

Lagging Indicator- An economic time series that reverses direction after that of the business cycle.

Selected Indicator- An economic time series whose timing to business cycles is unknown, but is of interest to Montana's economy.

Index- Any economic time series which indicates change in a factor from a reference year. The reference year is designated as 100 in this publication and may be selected arbitrarily. All indexes in this publication will designate the year selected, such as 1967 = 100; 1972 = 100, etc.

Montana Composite Index- A composite of six indicators of employment and economic activity: Building Permits, Manufacturing Employment: Average Weekly Hours in Manufacturing, Average Weekly Initial Claims, Accession Rate in Manufacturing, and Layoff rate in Manufacturing. A reverse trend has been used for the Layoff Rate and Average Weekly Initial Claims. The components are converted to a series of standardized changes and weights according to their significance and reliability as economic indicators in making the composite, indexed to 1972 = 100.

Real Spendable Earnings- Real spendable average weekly earnings of private nonagricultural production workers represents the earnings of a hypothetical worker after deductions for State Income, Federal Income, and Social Security taxes, and adjustment for change in purchasing power since 1967. This individual is assumed to be the sole support for a family of four, earn the average weekly gross earnings of production workers in Montana's private non-agricultural industries, and take standard tax tables. Purchasing power was adjusted by deflating Spendable Earnings based on the national ALL Items Consumer Price Index.

A NOTE ABOUT BENCHMARKING AND SEASONAL ADJUSTMENT CHANGES

Because of new benchmarks and new seasonal adjustment factors, some of the series in this publication have been changed to take into account the latest information available. 1980 benchmarks, which reflect the most recent and complete estimates of employment, account for revisions to indicators dealing with total and industry detailed employment. These benchmark levels are revised annually to adjust for sampling errors and any changes to industrial classifications. In addition, all of those series requiring seasonal adjustment have also been revised to reflect the most recent seasonal adjustment factors. Changes in these seasonal series can be attributed to the inclusion of 1980 data in the BLS seasonal adjustment method.

All numbers used in this publication are seasonally adjusted.

SECOND QUARTER ANALYSIS: 1981

Montana's Economic Indicators during the second quarter, 1981 were less favorable than the first quarter. Nearly two-thirds of the leading, coinciding and selected indicators registered negative movement, yet they are somewhat better in comparison to the second quarter, 1980.

The manufacturing accession rate, a leading indicator, recorded considerable movement. It rose by a monthly average of 1.5 per 100 employees. Other leading indicators reflecting some favorable movement are the manufacturing layoff rate, new business telephones, and withdrawals and dissolutions of corporations.

Total building permits dropped from an average of 584 per month to 353 per month during April, May, and June, 1981. Manufacturing average weekly hours dropped from an average of 42.2 per month to 41.7. This compares to average weekly hours of 42.5 for the second quarter, 1980.

The coinciding indicators, an economic time series which parallels changes in the business cycle, registered only two of seven indicators with positive movement. The manufacturing electric power sales index rose from an average of 128.3 during the first quarter to 134.1 during the second quarter. Commercial-industrial electric power sales reflected only a slight increase during the second quarter.

New car registrations recorded a considerable decline when total registrations dropped from 2,374 per month to 1,856 per month. The average monthly unemployment rate rose from 5.9% in January, February and March, to 6.3%

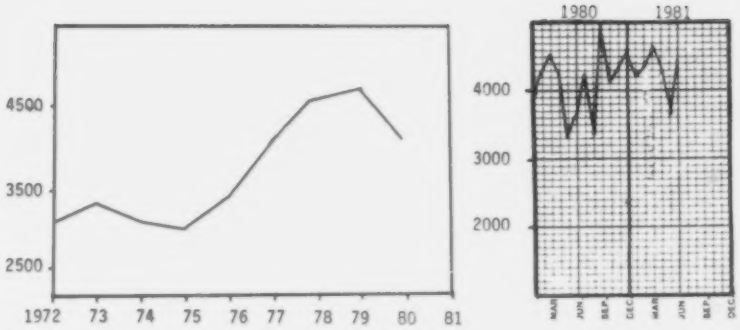
during the second three months of 1981. This compares to an average monthly rate of 6.0% during the second quarter of 1980.

Under the selected indicators, personal income is running at an average of $12.7 million per month less than the 1980 monthly average. The first quarter reported $580.7 million per month in personal income, while the 1980 average was $593.4 million.

The number of oil and gas wells completed continues to grow in 1981. The total number of wells completed jumped from 264 during the first quarter to 338 during the second quarter. This compares to 202 wells completed during the second quarter of 1980. Natural gas withdrawals and oil produced also registered increases over the first quarter, while oil refined and taxable gallons of gasoline reflected negative movement.

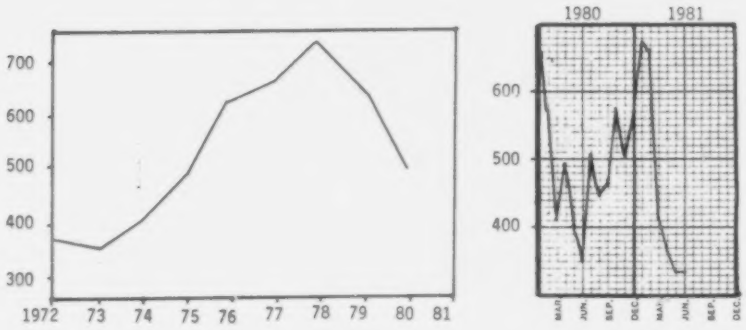
TOTAL NON-AGRICULTURAL PLACEMENTS

	1980	1981
January	3983	4224
February	4270	4352
March	4525	4684
April	4259	4221
May	3337	3656
June	3649	4469
July	4243	
August	3394	
September	4999	
October	4146	
November	4335	
December	4538	



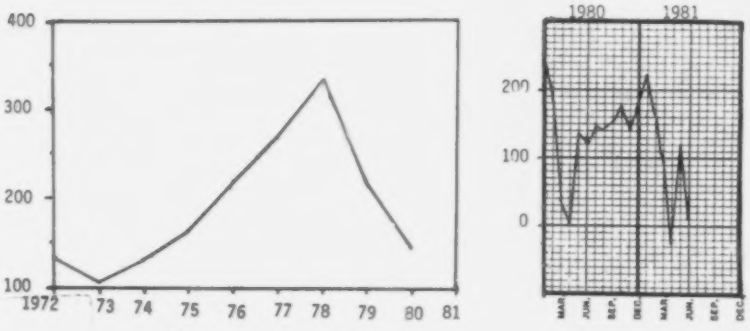
TOTAL NUMBER OF BUILDING PERMITS

	1980	1981
January	657	676
February	571	661
March	411	414
April	494	367
May	403	346
June	351	346
July	507	
August	447	
September	465	
October	575	
November	506	
December	557	



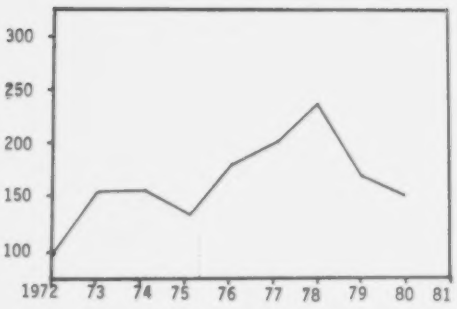
NUMBER OF RESIDENTIAL BUILDING PERMITS

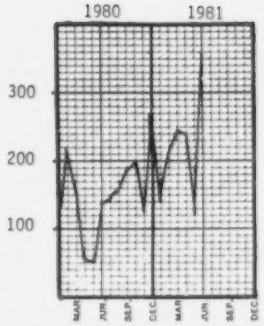
	1980	1981
January	234	221
February	184	163
March	39	95
April	4	-24
May	135	117
June	121	11
July	148	
August	143	
September	153	
October	177	
November	145	
December	174	



NEW BUSINESS TELEPHONES

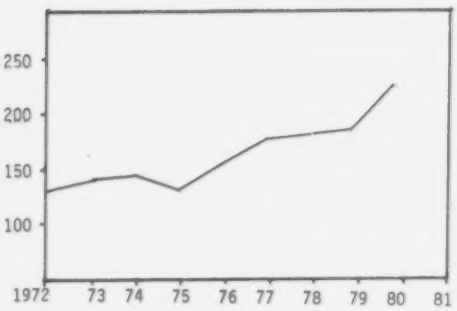
	1980	1981
January	135	141
February	218	213
March	154	245
April	58	238
May	53	122
June	138	359
July	145	
August	159	
September	185	
October	197	
November	124	
December	267	

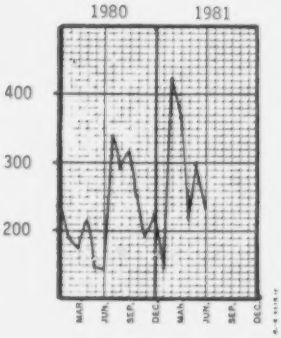




NEW CORPORATIONS

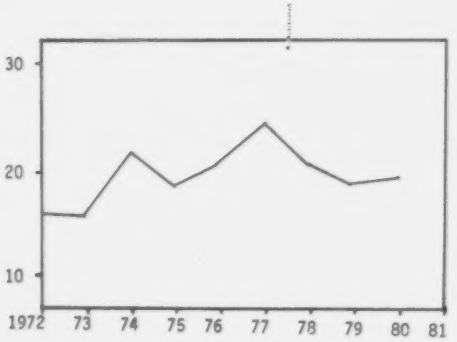
	1980	1981
January	227	145
February	190	422
March	176	366
April	216	217
May	146	300
June	145	235
July	339	
August	294	
September	316	
October	251	
November	194	
December	225	

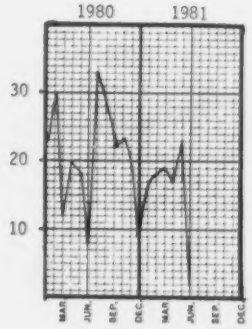




WITHDRAWALS AND DISSOLUTIONS OF CORPORATIONS

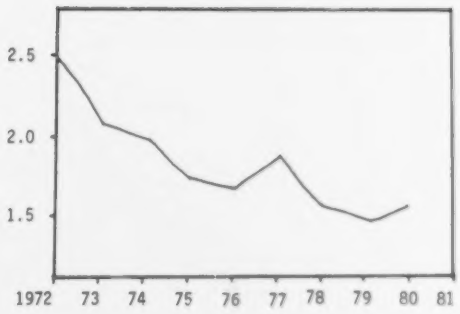
	1980	1981
January	21	16
February	30	18
March	12	19
April	20	17
May	18	23
June	8	2
July	33	
August	28	
September	22	
October	23	
November	19	
December	9	

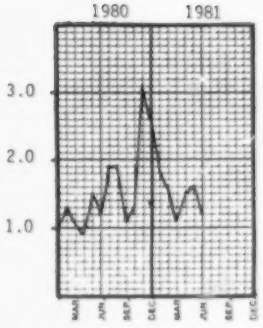




MANUFACTURING QUIT RATE (PER 100 EMPLOYEES)

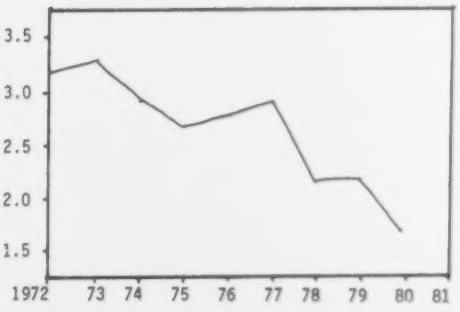
	1980	1981
January	1.0	1.8
February	1.3	1.6
March	1.1	1.1
April	.9	1.5
May	1.5	1.6
June	1.2	1.2
July	1.9	
August	1.9	
September	1.1	
October	1.3	
November	3.1	
December	2.6	

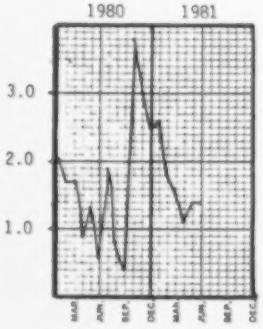




NEW HIRES IN MANUFACTURING (PER 100 EMPLOYEES)

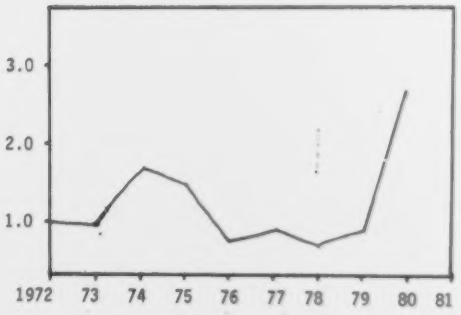
	1980	1981
January	2.0	2.6
February	1.7	1.8
March	1.7	1.5
April	1.0	1.1
May	1.4	1.4
June	.6	1.4
July	1.9	
August	.8	
September	.4	
October	3.8	
November	3.1	
December	2.6	

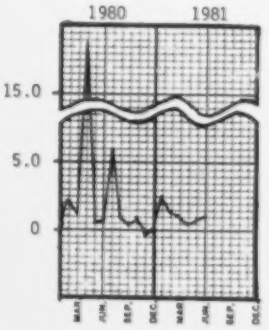




MANUFACTURING LAYOFF RATE (PER 100 EMPLOYEES)

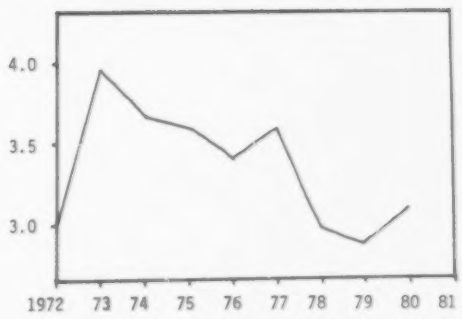
	1980	1980
January	.3	2.5
February	2.2	1.4
March	1.3	1.2
April	18.8	.6
May	.5	.8
June	.7	1.2
July	5.9	
August	1.0	
September	.4	
October	.8	
November	-.3	
December	.1	

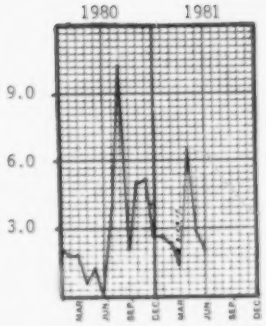




MANUFACTURING ACCESSION RATE (PER 100 EMPLOYEES)

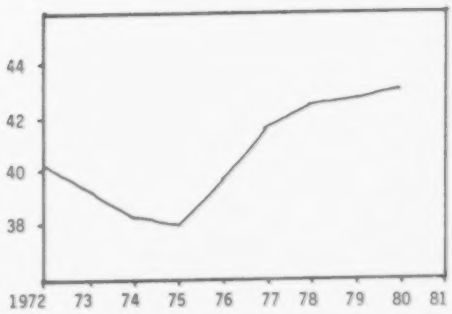
	1980	1981
January	2.0	2.6
February	1.9	2.4
March	1.9	1.6
April	.7	6.5
May	1.3	2.9
June	0.0	2.0
July	3.8	
August	10.8	
September	2.2	
October	5.0	
November	5.2	
December	2.7	

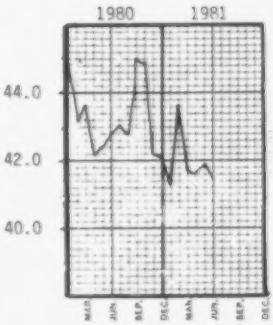




MANUFACTURING AVERAGE WEEKLY HOURS

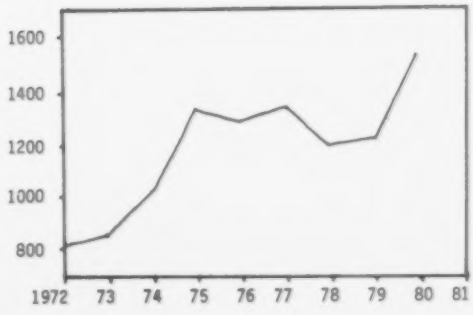
	1980	1981
January	44.8	41.3
February	43.2	43.6
March	43.6	41.7
April	42.2	41.6
May	42.5	41.9
June	42.8	41.5
July	43.0	
August	42.8	
September	45.0	
October	44.9	
November	42.2	
December	42.1	

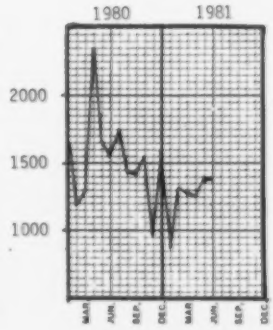




AVERAGE WEEKLY INITIAL CLAIMS

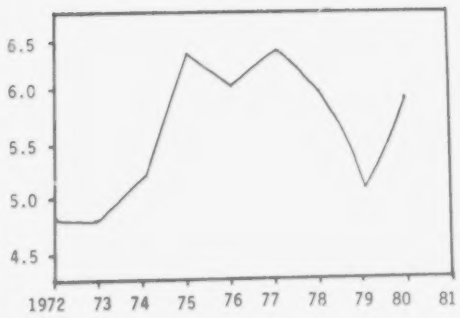
	1980	1981
January	1640	883
February	1197	1314
March	1299	1276
April	2346	1260
May	1659	1385
June	1551	1389
July	1749	
August	1443	
September	1435	
October	1540	
November	975	
December	1588	

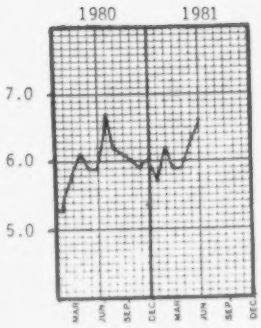




UNEMPLOYMENT RATE (PERCENT)

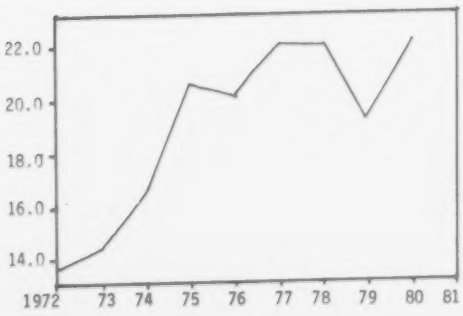
	1980	1981
January	5.3	5.7
February	5.3	6.2
March	5.8	5.9
April	6.1	5.9
May	5.9	6.3
June	5.9	6.6
July	6.7	
August	6.2	
September	6.1	
October	6.0	
November	5.9	
December	6.0	

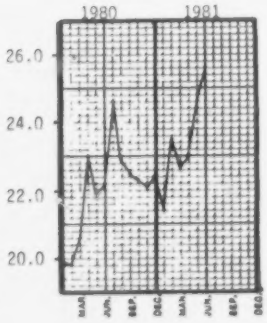




UNEMPLOYMENT TOTAL (IN THOUSANDS)

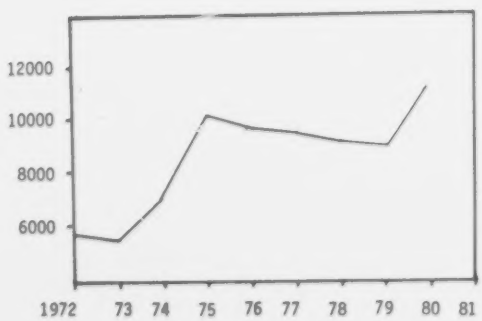
	1980	1981
January	19.9	21.4
February	19.8	23.5
March	20.6	22.7
April	23.0	23.0
May	21.9	24.7
June	22.1	25.6
July	24.6	
August	22.9	
September	22.5	
October	22.3	
November	22.1	
December	22.4	

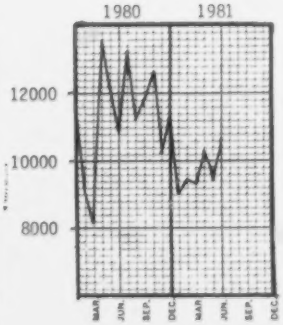




AVERAGE WEEKLY INSURED UNEMPLOYED

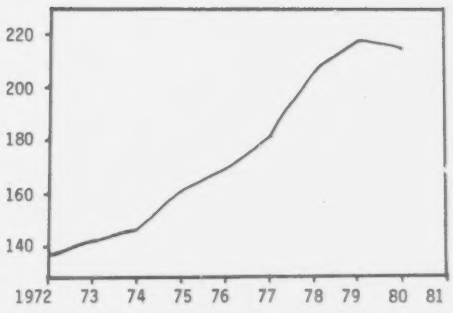
	1980	1981
January	11063	9040
February	9304	9423
March	8182	9391
April	13547	10322
May	12164	9466
June	10865	10635
July	13275	
August	11241	
September	11816	
October	12632	
November	10217	
December	11275	

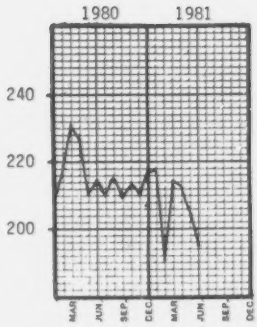




RESIDENTIAL ELECTRICAL POWER SALES INDEX (1967=100)

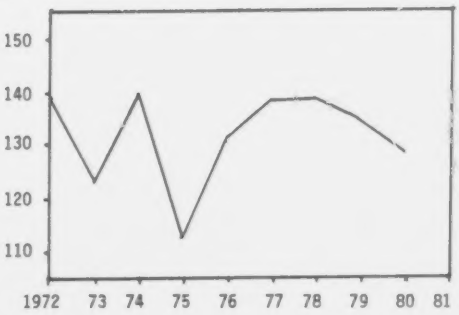
	1980	1981
January	211.3	217.8
February	219.2	190.8
March	231.0	214.4
April	227.3	212.1
May	210.7	204.3
June	214.8	195.3
July	210.1	
August	215.5	
September	209.8	
October	213.6	
November	210.1	
December	217.3	

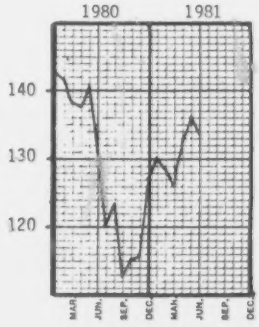




MANUFACTURING ELECTRICAL POWER SALES INDEX (1967=100)

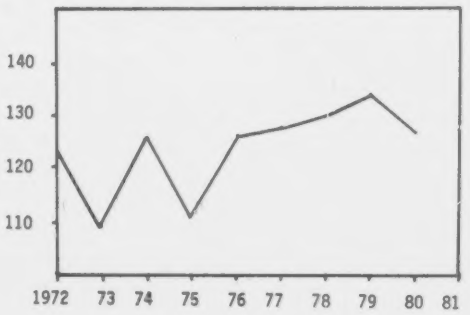
	1980	1981
January	142.8	130.1
February	141.8	128.8
March	138.3	126.1
April	137.9	132.5
May	140.9	136.1
June	131.1	133.9
July	120.1	
August	123.5	
September	112.9	
October	115.2	
November	115.9	
December	127.2	

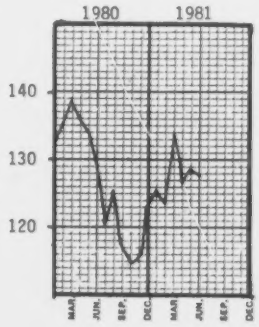




COMMERCIAL-INDUSTRIAL ELECTRICAL POWER SALES INDEX (1967=100)

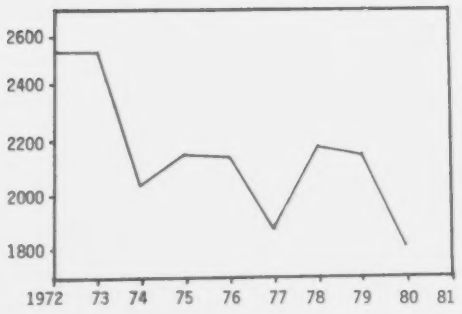
	1980	1981
January	132.9	125.5
February	135.5	123.5
March	138.7	133.5
April	135.9	126.6
May	134.0	128.8
June	129.1	127.9
July	120.5	
August	125.3	
September	117.4	
October	114.9	
November	115.8	
December	123.0	

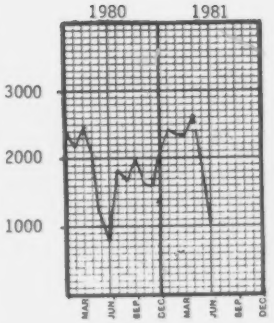




NEW CAR REGISTRATIONS

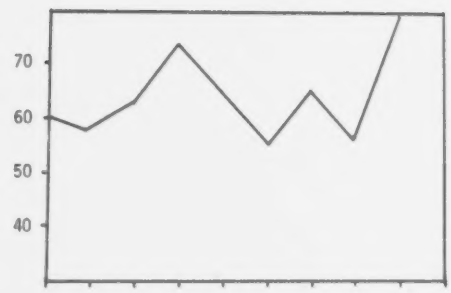
	1980	1981
January	2335	2416
February	2207	2351
March	2427	2355
April	2109	2619
May	1224	1907
June	791	1041
July	1801	
August	1682	
September	1962	
October	1600	
November	1591	
December	2018	

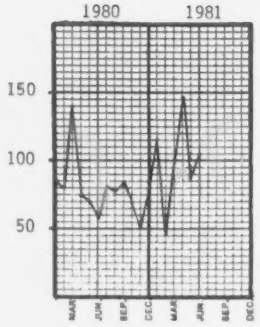




OIL AND GAS WELLS COMPLETED

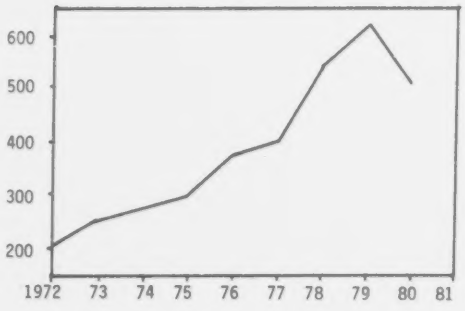
	1980	1981
January	86	116
February	80	46
March	140	102
April	74	147
May	70	87
June	58	104
July	82	
August	77	
September	84	
October	69	
November	51	
December	79	

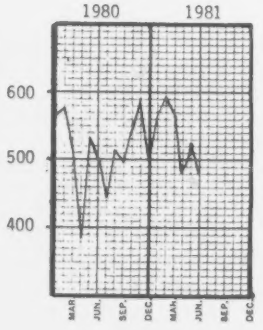




HELP WANTED ADVERTISING (FROM 5 MAJOR CITY DAILIES)

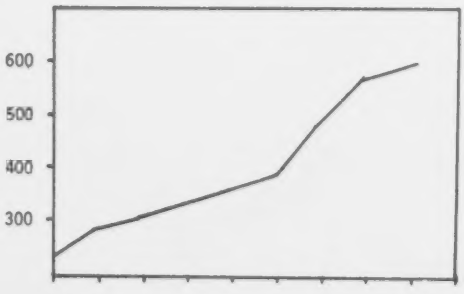
	1980	1981
January	567	564
February	577	592
March	514	563
April	384	484
May	531	525
June	508	481
July	445	
August	512	
September	497	
October	544	
November	588	
December	505	

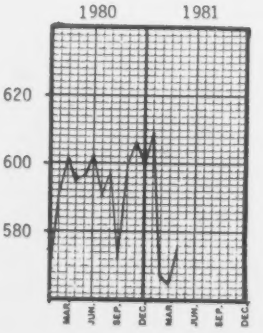




MONTANA PERSONAL INCOME (IN MILLION DOLLARS)

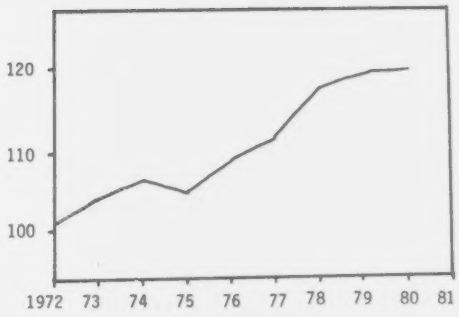
	1980	1981
January	569.3	609.3
February	591.8	567.8
March	601.1	565.1
April	595.3	575.3
May	596.5	
June	602.3	
July	590.2	
August	597.5	
September	572.0	
October	599.0	
November	606.2	
December	600.1	

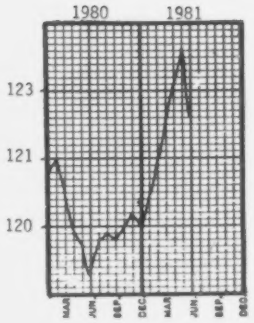




NONAGRICULTURAL EMPLOYMENT INDEX
U.S.: 1972=100

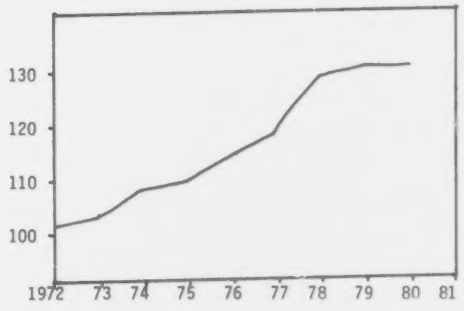
	1980	1981
January	120.8	120.5
February	121.0	121.0
March	120.5	121.6
April	120.0	122.1
May	119.7	122.6
June	119.3	121.6
July	119.8	
August	119.9	
September	119.8	
October	120.0	
November	120.2	
December	120.0	

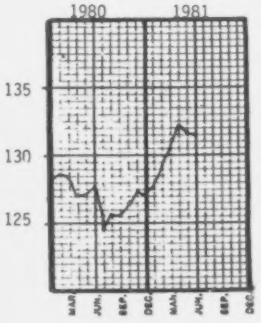




NONAGRICULTURAL EMPLOYMENT INDEX
MONTANA: 1972=100

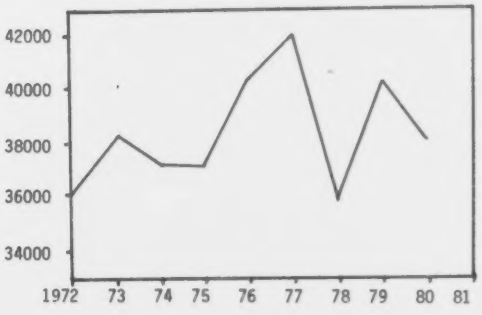
	1980	1981
January	128.4	127.8
February	128.6	129.4
March	128.4	130.7
April	127.1	132.2
May	127.2	131.5
June	127.7	131.5
July	124.6	
August	125.5	
September	125.5	
October	126.5	
November	127.4	
December	127.1	

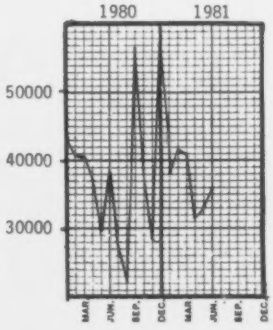




TAXABLE GALLONS GASOLINE
(THOUSAND GALLONS)

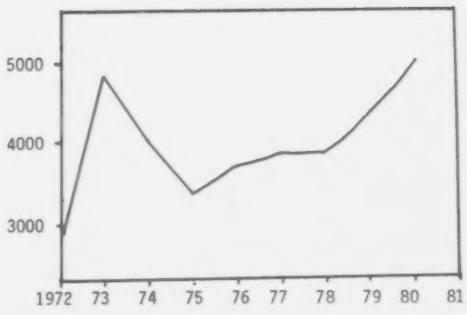
	1980	1981
January	43351	38162
February	40752	41891
March	40230	40972
April	37129	31894
May	29968	33016
June	38446	35970
July	26764	
August	22306	
September	56853	
October	38669	
November	28400	
December	57612	

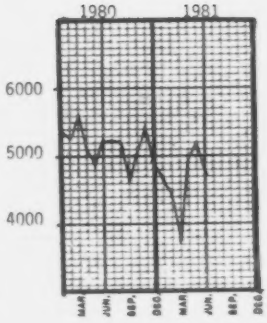




NATURAL GAS WITHDRAWLS (MILLION CU.FT.)

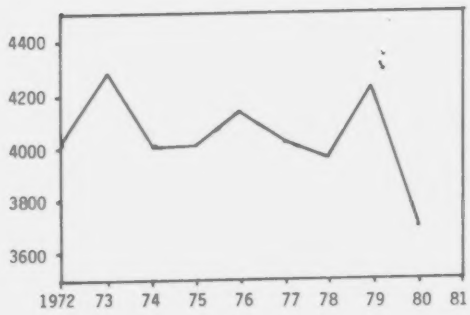
	1980	1981
January	5350	4665
February	5280	4499
March	5603	3763
April	5176	4903
May	4878	5198
June	5214	4749
July	5222	
August	5212	
September	4647	
October	5050	
November	5442	
December	4930	

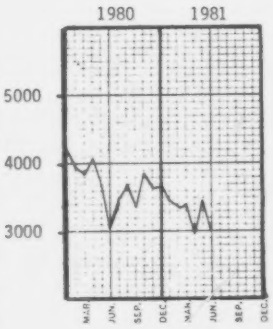




OIL REFINED (THOUSAND BARRELS)

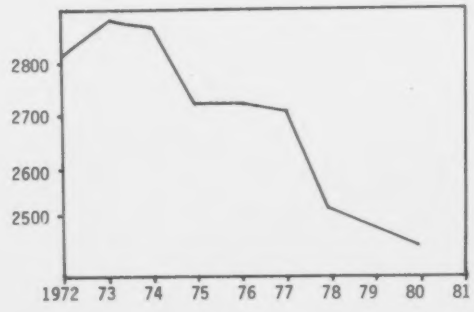
	1980	1981
January	4249	3468
February	3932	3380
March	3865	3395
April	4053	2992
May	3677	3448
June	3071	3037
July	3466	
August	3694	
September	3384	
October	3822	
November	3660	
December	3652	

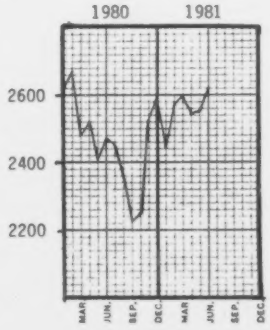




OIL PRODUCTION (THOUSAND BARRELS)

	1980	1981
January	2620	2445
February	2668	2576
March	2479	2599
April	2520	2542
May	2411	2559
June	2466	2618
July	2448	
August	2362	
September	2232	
October	2253	
November	2525	
December	2583	





EMPLOYMENT IN MONTANA'S INDUSTRIAL SECTORS: 2ND QUARTER 1981

Montana's nonagricultural wage and salary employment registered a 1,800 decline during the second quarter of 1981. Average monthly employment during the second three months was 285,700 compared to 282,700 for the same period in 1980. Three industries accounted for a decrease of 3,600 employees.

Contract construction dropped from 16,000 employees to 14,600 employees in the second quarter. The service industry had nearly the same change, as it fell by 1,200 employees to 57,000. Other significant declines in employment include a decrease of 500 in wholesale and retail trade employment, due to retail trade employment dropping from 55,400 to 54,400 between April and June.

The mining industry began to reflect signs of growth in the second quarter as it added 600 employees. An average of 8,700 compares to 8,100 for the first three months of the year. Manufacturing and the lumber and wood products industry both grew by about 400 employees. The lumber and wood products industry totaled 9,800 employees during the second quarter, 1981 compared to 7,800 in the same period of 1980.

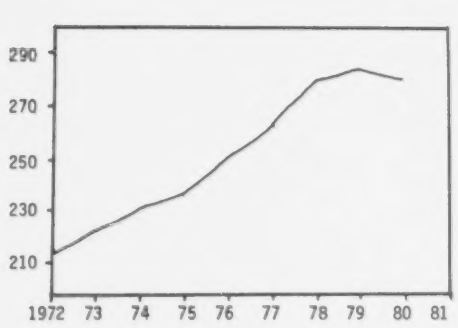
Finance, insurance and real estate registered very little change in employment, as did government. A decrease of 200 was noted in the transportation and public utilities industry when it dropped from 24,000 employees to 23,800. This compares to employment of 23,100 in the second quarter of 1980.

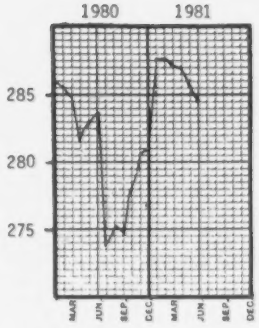
Nonagricultural wage and salary employment can be expected to fall somewhat during the third quarter as summer time activity begins to slow down in most industrial sectors.

INDUSTRIAL EMPLOYMENT

NONAGRICULTURAL WAGE AND SALARY (IN THOUSANDS)

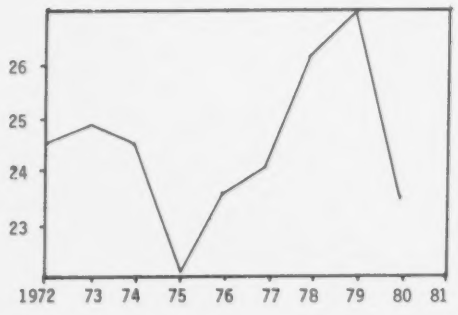
	1980	1981
January	285.9	287.6
February	285.4	287.7
March	284.8	287.1
April	281.6	287.0
May	282.9	285.7
June	283.6	284.5
July	273.8	
August	275.2	
September	274.7	
October	277.8	
November	280.5	
December	280.8	

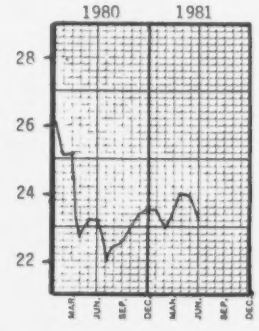




MANUFACTURING EMPLOYMENT (IN THOUSANDS)

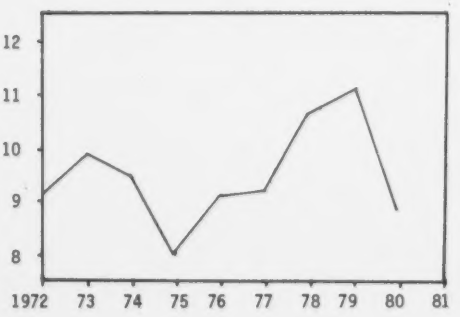
	1980	1981
January	26.1	23.5
February	25.1	23.0
March	25.1	23.4
April	22.7	24.0
May	23.2	23.9
June	23.2	23.3
July	22.0	
August	22.5	
September	22.6	
October	23.1	
November	23.4	
December	23.5	

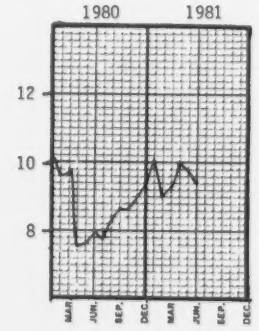




LUMBER AND WOOD PRODUCTS (IN THOUSANDS)

	1980	1981
January	10.2	10.1
February	9.7	9.0
March	9.8	9.3
April	7.6	10.0
May	7.7	9.8
June	8.0	9.5
July	7.8	
August	8.4	
September	8.7	
October	8.7	
November	9.1	
December	9.3	

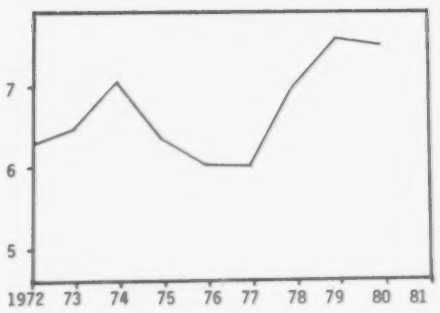


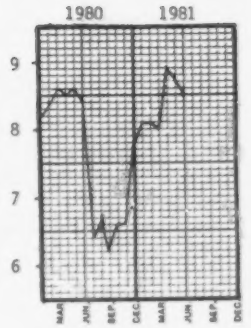


INDUSTRIAL EMPLOYMENT

MINING
(IN THOUSANDS)

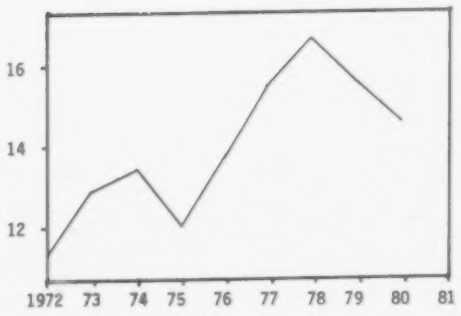
	1980	1981
January	8.4	8.1
February	8.4	8.1
March	8.6	8.0
April	8.5	8.9
May	8.6	8.7
June	8.4	8.5
July	6.4	
August	6.7	
September	6.2	
October	6.6	
November	6.6	
December	7.7	

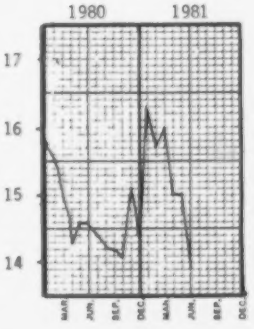




CONTRACT CONSTRUCTION
(IN THOUSANDS)

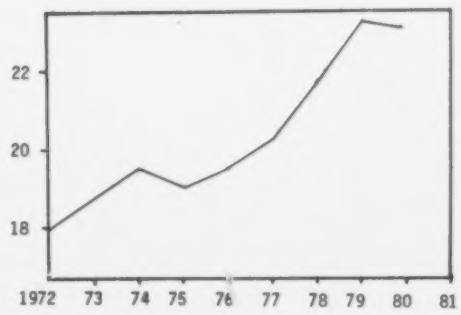
	1980	1981
January	15.8	16.3
February	15.5	15.7
March	15.0	16.0
April	14.3	15.9
May	14.6	15.0
June	14.6	13.8
July	14.4	
August	14.3	
September	14.2	
October	14.1	
November	15.1	
December	14.4	

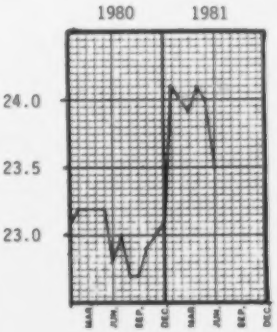




TRANSPORTATION AND PUBLIC UTILITIES
(IN THOUSANDS)

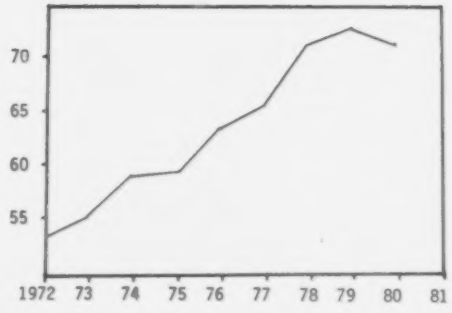
	1980	1981
January	23.1	24.1
February	23.2	24.0
March	23.2	23.9
April	23.2	24.1
May	23.2	24.0
June	22.8	23.4
July	23.0	
August	22.7	
September	22.7	
October	22.9	
November	23.0	
December	23.1	

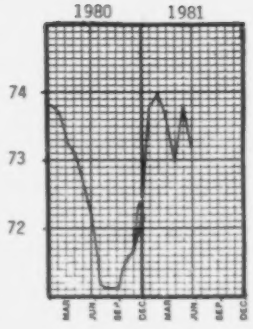




WHOLESALE AND RETAIL TRADE (IN THOUSANDS)

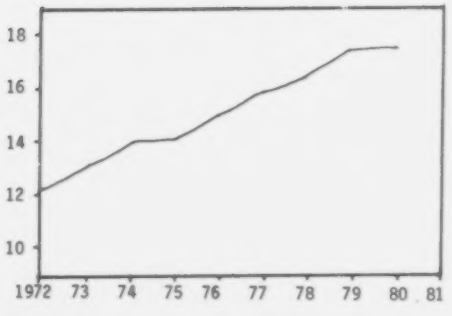
	1980	1981
January	73.8	73.8
February	73.7	74.0
March	73.3	73.6
April	73.1	73.0
May	72.7	73.8
June	72.1	73.2
July	71.2	
August	71.1	
September	71.1	
October	71.5	
November	71.7	
December	72.1	

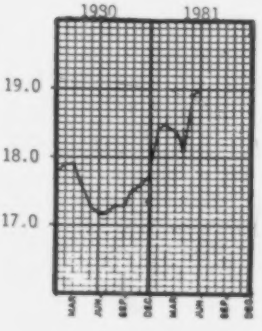




WHOLESALE TRADE (IN THOUSANDS)

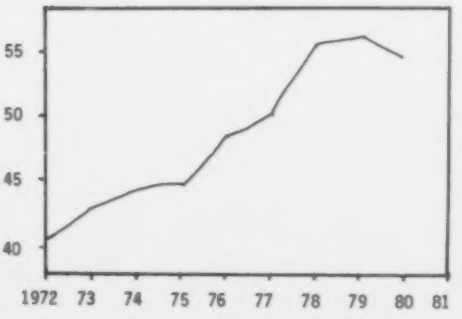
	1980	1981
January	17.8	18.4
February	17.9	18.5
March	17.9	18.4
April	17.6	18.1
May	17.3	18.9
June	17.2	19.0
July	17.2	
August	17.3	
September	17.3	
October	17.5	
November	17.6	
December	17.7	

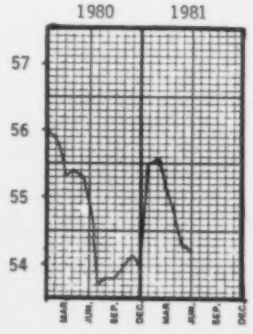




RETAIL TRADE (IN THOUSANDS)

	1980	1981
January	56.0	55.5
February	55.8	55.6
March	55.3	55.1
April	55.4	54.8
May	55.3	54.3
June	54.9	54.2
July	53.7	
August	53.8	
September	53.8	
October	54.0	
November	54.1	
December	54.0	

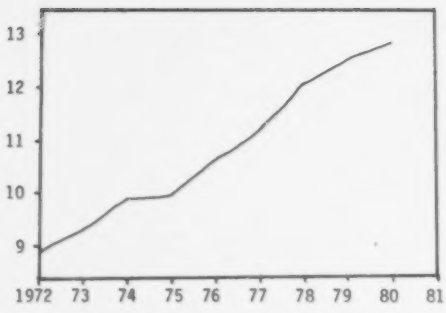


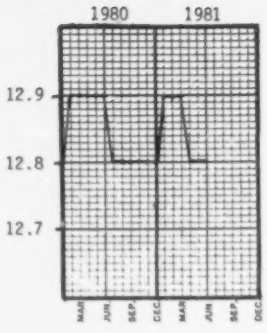


INDUSTRIAL EMPLOYMENT

FINANCE, INSURANCE & REAL ESTATE (IN THOUSANDS)

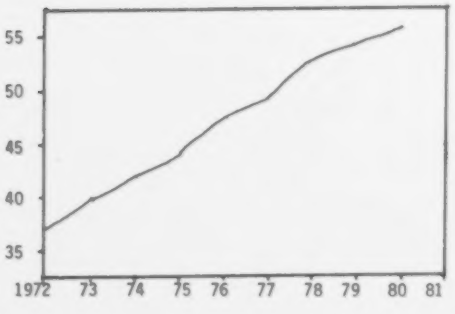
	1980	1981
January	12.8	12.9
February	12.9	12.9
March	12.9	12.9
April	12.9	12.8
May	12.9	12.8
June	12.9	12.8
July	12.8	
August	12.8	
September	12.8	
October	12.8	
November	12.8	
December	12.8	

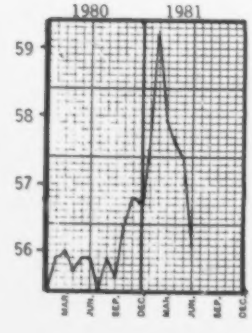




SERVICES (IN THOUSANDS)

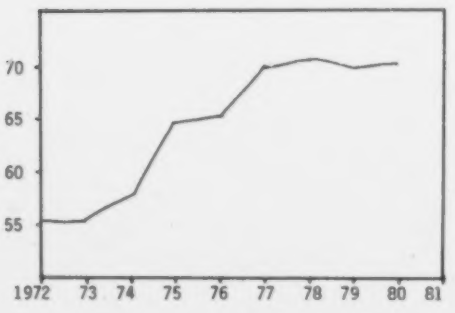
	1980	1981
January	55.4	57.5
February	55.9	59.2
March	56.0	57.9
April	55.7	57.6
May	55.9	57.8
June	55.9	56.1
July	55.4	
August	55.9	
September	55.6	
October	56.4	
November	56.8	
December	56.7	

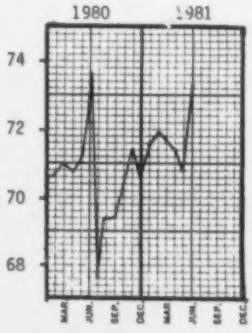




GOVERNMENT (IN THOUSANDS)

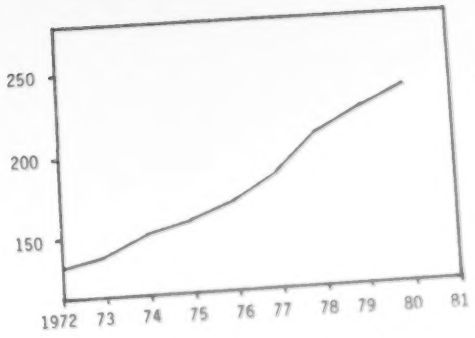
	1980	1981
January	70.6	71.6
February	70.8	71.9
March	71.0	71.7
April	70.8	71.4
May	71.2	70.8
June	73.8	73.3
July	67.6	
August	69.4	
September	69.4	
October	70.6	
November	71.4	
December	70.7	

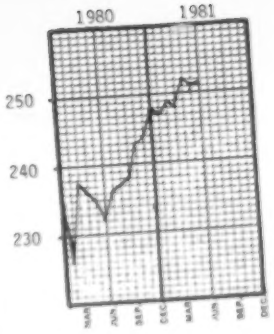




GROSS WEEKLY EARNINGS (IN DOLLARS)

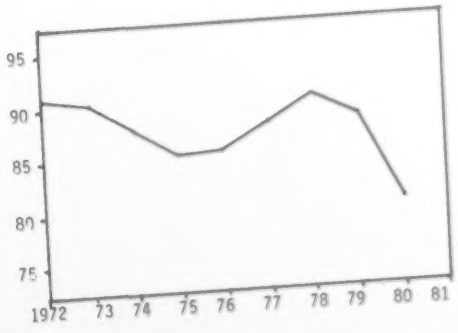
	1980	1981
January	234.61	247.32
February	226.33	248.84
March	237.50	248.00
April	236.05	252.11
May	235.67	251.00
June	232.36	251.53
July	236.29	
August	237.30	
September	238.29	
October	243.05	
November	243.99	
December	247.86	

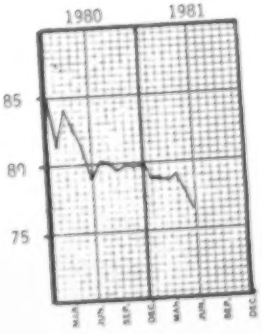




REAL WEEKLY SPENDABLE EARNINGS (IN DOLLARS)

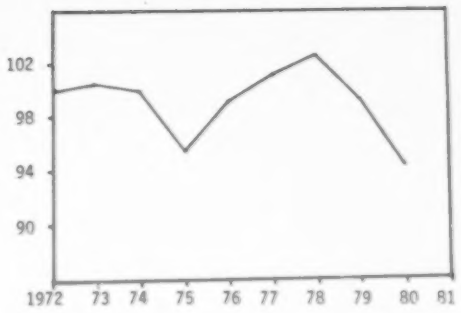
	1980	1981
January	84.82	78.89
February	81.40	78.78
March	84.12	78.64
April	82.52	79.03
May	81.39	77.81
June	78.93	76.56
July	80.28	
August	80.01	
September	79.50	
October	79.85	
November	79.79	
December	79.98	

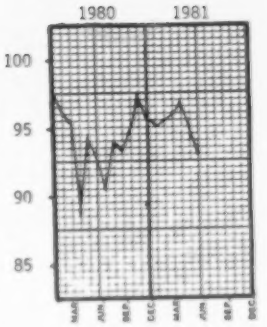




MONTANA
COMPOSITE INDEX
(1972=100)

	1980	1981
January	97.2	95.1
February	96.2	95.4
March	95.4	95.9
April	88.6	96.8
May	94.3	94.8
June	92.6	93.0
July	90.4	
August	93.9	
September	93.3	
October	95.0	
November	97.4	
December	95.5	





MARGINAL EMPLOYMENT
ADJUSTMENT INDEX
(1972=100)

	1980	1981
January	92.8	94.2
February	92.9	94.8
March	93.0	94.5
April	88.1	96.7
May	94.7	94.3
June	92.8	92.8
July	90.8	
August	94.5	
September	93.3	
October	94.1	
November	96.9	
December	94.2